



Environmental Protection Agency
Annual Report and Accounts | **2015**

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 coordinating 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 (CAFE) 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 Climate, Licensing, Research and Resource Use
- Office of Environmental Enforcement
- Office of Environmental Assessment
- Office of Radiological Protection
- 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.

ENVIRONMENTAL PROTECTION AGENCY

EPA ANNUAL Report 2015

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Cover image – Cork coastline looking towards the
entrance to Cork Harbour
Photograph by Tadhg O'Mahony

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The layout of this report has been structured and aligned to reflect our Strategic Plan 2013–2015 – *Working with Others for a Better Environment*.

Key Statistics

LICENCES

622

licences

152

technical amendments completed

ENFORCEMENT

265

inspections to urban waste water sites

1,300+

visits to industrial and waste facilities

15

prosecutions heard

69

drinking water site audits

31

drinking water Directions issued to Irish Water

1,224

homes tested for radon

43

new research projects awarded

WASTE

53%

decrease in waste being landfilled between 2011 and 2014

50%

increase in 2014 in waste being exported as a fuel

INFORMATION

13,000

EPA Twitter Followers across 7 Twitter accounts

1.5m+

visits to the EPA website www.epa.ie

2,500+

queries from the public

108

information requests (65 AIE & 43 FOI)



€1.2m

worth of Green Business savings identified

Average €41,500 savings identified for Green Business companies

2015 in Numbers

Environmental Indicators Dashboard

A selection of key environmental indicators for Ireland is presented below, with the environmental status/trend of each. Visit www.epa.ie/irelandsenvironment/environmentalindicatorsdashboard to explore in more detail and view the relevant up-to-date data.

AIR		STATUS/ TREND
 AIR	Air Emissions: Nitrogen Oxides	
	Air Quality: Ground Level Ozone	
	Air Quality: Nitrogen Dioxide	
	Air Quality: Particulate Matter PM ₁₀	
CLIMATE		STATUS/ TREND
 CLIMATE	Greenhouse Gas Emissions: By Sector	
	Greenhouse Gas Emissions: Projections to 2020	
WASTE		STATUS/ TREND
 WASTE	Biodegradable Waste Diversion from Landfill	
	Household Waste per Capita	
	Recovery and Disposal of Municipal Waste	
	Recovery of Packaging Waste	
NATURE		STATUS/ TREND
 NATURE	Conservation Status of Listed Habitats	
	Conservation Status of Listed Species	
	Threatened Species	
	Countryside Birds	

ENVIRONMENT & WELLBEING		STATUS/ TREND
 ENVIRONMENT & WELLBEING	Air Quality: Particulate Matter PM _{2.5}	
	Bathing Water Quality	
	Drinking Water Quality	
	Urban Waste Water Treatment	
WATER		STATUS/ TREND
 WATER	Nitrates in Groundwater	
	River Water Quality: Phosphates	
	Coastal Water Quality	
	Transitional Water Quality	
	Lake Water Quality	
SUSTAINABLE ECONOMY		STATUS/ TREND
 SUSTAINABLE ECONOMY	Car Numbers & Engine Size	
	Environmental Tax Revenue	N/A
	Renewable Energy Production	
	Total Final Energy Consumption by Fuel	
	Resource Productivity	
LAND		STATUS/ TREND
 LAND & SOIL	Afforestation	
	Land Cover	
	Organic Agricultural Land	





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DIRECTOR GENERAL'S STATEMENT

It is my pleasure to introduce the Annual Report of the Environmental Protection Agency for the year 2015. The EPA performs a wide range of statutory functions in fulfilment of our mandate and of our mission – to protect and improve the environment as a valuable asset for the people of Ireland and to protect people and the environment from harmful effects of radiation and pollution.



This report provides an overview of the work and main achievements of the EPA over the course of the year in the areas of knowledge provision, environmental regulation and advocacy for the environment.

Climate Change

2015 saw a major step forward in global and local actions on climate change. The adoption of the Paris Agreement on climate change in December provides for an ambitious, legally binding framework for global action. In Ireland, climate legislation was enacted for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy by 2050. However, annual EPA greenhouse gas projections show that Ireland faces significant challenges in becoming a low carbon economy. Ireland's EU 2020 reduction target is 20% relative to emissions in 2005. It affects all sectors except those companies participating in the EU Emissions Trading Scheme (ETS). 2015 EPA projections indicated that emissions from non-ETS sectors would be 14% below 2005 levels under best case scenario. Over 70% of Ireland's greenhouse gas emissions come from three sectors: agriculture, transport and energy. Provisional greenhouse gas emissions figures for 2014, released in December 2015, show a slight fall (0.7%) overall compared to 2013 figures, despite increases in some sectors.

Globally, greenhouse gas emissions need to be reduced to near or below zero before the end of this century. EPA data and reports have highlighted that Ireland must follow a pathway to decarbonising energy, transport and heating. The agriculture, forestry and land use sectors should achieve effective greenhouse gas emissions neutrality by 2050. This will take planning, investment and time but can be achieved in the overall framework of national, EU and global commitments.

Drinking Water

EPA records showed that 6,000 people were on a long term boil water notice in October 2015, down from a peak of 23,000 in early 2015. Supplies in need of improvement to ensure the safety and security of drinking water stood at 112

by October. Although 99% of samples taken during 2014 complied with microbiological and chemical standards, an increased pace of investment in drinking water infrastructure is required to eliminate the risk of *Cryptosporidium* and the risk of long term boil water notices. As water quality regulator, the EPA has also called for comprehensive national strategies to address priorities such as appropriate disinfection, lead, pesticides and water safety planning.

Waste Water Treatment

In November, the EPA called for a reversal of the decline in capital expenditure for waste water treatment seen in recent years, to prevent the adverse environmental and public health effects associated with sewage. We also stated that there is a need to improve the operation and management of existing waste water plants. The EPA's *Urban Waste Water Treatment Report for 2014* recorded that untreated sewage was still being discharged at 45 urban areas, with counties Cork, Donegal and Galway the worst affected areas. Of the 174 large urban areas with waste water treatment, 143 (82%) achieved the mandatory EU quality standards with 12 not meeting the Urban Waste Water Treatment Directive's requirement to provide secondary treatment. Waste water discharges contributed to poor bathing water quality at seven designated bathing waters in 2014.

A review of the first year of the National Inspection Plan for domestic waste water treatment systems, during which local authority inspectors carried out 987 inspections, showed that almost half of household septic tanks failed initial inspection. Following remediation work by householders, 79% of the inspected systems complied with the regulations.

Industrial & Waste Licence Enforcement

In 2015, the EPA conducted over 1,300 site visits at licensed facilities. Enforcement focuses in particular on facilities that pose a risk to the environment and public health and the EPA continues to take action against companies and their directors to ensure compliance.

In terms of controlling pollutant emissions to atmosphere, the performance of over 750 EPA licensed activities is generally very good, as confirmed in *EPA Licensed Sites – Report on Air Emissions 2014*, released in August. However, more than 750 complaints about odour nuisance from licensed sites were made to the EPA by the public during 2014. Almost all of these related to the Waste Management and Food & Drink sectors, with ten sites accounting for almost 70% of the complaints. A further 149 complaints were made relating to noise and five sites accounted for nearly 80% of these complaints.

The *EPA Licensed Sites – Report on Waste Enforcement 2014* was released in December. The report highlighted that EPA inspections identified poor management and storage of waste at some facilities, giving rise to unacceptable odour nuisance and fire risk, and this is a priority issue for EPA enforcement.

Bathing Water

Overall, the quality of Ireland's bathing waters continues to be very good. New EU standards introduced in 2014 provide a much higher level of protection for bathers. In 2014, 94% of Irish bathing waters met the new stricter standards and three quarters of bathing waters were rated as being of "Excellent" quality. Of 136 identified bathing waters, seven failed to comply with the minimum mandatory standard and were classified as being of "Poor" quality. Pollution sources appeared to be mainly linked to the impacts of waste water discharges. The EPA is also now reporting on other non-designated beaches which are being monitored by local authorities such as Green Coast beaches.

Water Quality

The quality of Irish groundwater and surface waters is among the best in Europe; however, meeting the requirements of the EU Water Framework Directive over the coming years will prove challenging for Ireland. Despite some modest recent improvement in the quality of our waters, as reported in the Water Quality in Ireland report published in 2015, many impacts need to be addressed to bring all waters up to a satisfactory level and to protect waters already in good condition. Eutrophication from nutrient enrichment continues to be the main issue facing Irish waters. The most recent water status assessment shows that approximately half of the rivers, lakes and estuaries assessed, and 4% of our coastal waters (by area), require improvement to achieve satisfactory condition.

Clean Air

Environmental protection and health protection are inextricably linked. While Ireland's air quality is good, relative to other EU member states, maintaining good air quality everywhere in Ireland is a growing challenge. When releasing the 2014 air quality report in September, the EPA recommended that two key issues impacting on air quality in Ireland need to be tackled – transport emissions in large urban areas and emissions from smoky fuels in our small towns around the country.

Though Ireland did not exceed any legal EU limit values in 2014 for ambient air quality at any of the air quality network monitoring stations, particulate matter and ozone exceeded World Health Organisation guideline values in 2014 at some monitoring stations. The EPA has therefore called for movement towards the adoption of the stricter WHO air quality guidelines in EU legislation, in particular for particulates and ozone.

As legal standards, these would provide a greater level of protection of air quality and public health across Europe and in Ireland. Dioxin levels continue to compare favourably with previous EPA studies and other EU countries.

Accessible Information

Providing high quality, timely environmental information allows for informed decision making by citizens and businesses as well as Government. The EPA is continually looking at more accessible ways to deliver public data. In 2015 the EPA redesigned the Ireland's Environment web resource to allow users to more easily view the data and also download it in various formats. We were proud to be awarded the 2016 eGovernment General Award for the resource. The EPA's mapping service, My Local Environment, provides local environmental information within a 1–15 km radius. In 2015 the online resource was expanded to include the national radon map. The EPA also developed an Android version of the successful "See it? Say it!" iOS app, providing a convenient way for people to report environmental pollution using their mobile phones. "See it? Say it!" links to the local authority-run www.fixyourstreet.ie web service.

In Conclusion

As the Annual Report makes plain, the mandate of the EPA continues to expand into an ever broader range of activities. The EPA is therefore fortunate in having a professional, adaptable and committed staff whose hard work contributes to the delivery of our mandate and ambitions. Three of our colleagues retired in 2015. On my behalf, and on behalf of the Directors and staff of the EPA, I would like to thank Kieran O'Brien, Isabella Bolger and Bea Claydon for their indispensable contributions to the work of the EPA and wish them well.

During 2015 we undertook a corporate strategy development process during which we engaged extensively with our staff and many stakeholders, including the EPA Advisory Committee. I wish to thank those involved for their valuable input, particularly those who took the time to respond to our public consultation in October. The ambitious *Strategic Plan 2016–2020 – Our Environment, Our Wellbeing* was completed and published early in 2016 and sets out what we intend to achieve over the next five years.

The EPA will further strengthen its core functions of regulation, enforcement and assessment over the life of our new statement of strategy, prioritising air and water quality, climate change and enhancing the radiation protection framework. The EPA will also seek to engage more closely with citizens, communities and businesses, to mobilise sustainable behaviours.

While the EPA clearly has a particular role to play, to which we are fully committed, every sector and every citizen has a contribution to make as many of today's environmental problems are complex and require a broad societal response. Small changes make a big difference and we continue to urge people to consider making incremental changes to protect the environment. The scientific data, research and information we provide about Ireland's environment will continue to inform policy and support public engagement and participation.

To conclude, I would like to express my sincere thanks to EPA staff for their hard work and dedication, as well as to the EPA Advisory Committee and my fellow Directors for their support and commitment.



Laura Burke

EPA Director General



OUR MISSION:

To protect and improve the environment as a valuable asset for the people of Ireland. To protect our people and the environment from the harmful effects of radiation and pollution.

OUR VISION:

A clean, healthy and well protected environment supporting a sustainable society and economy.

OUR VALUES:

Our Stewardship

- ▲ We are a trusted, independent and authoritative advocate for the environment.
- ▲ We make objective decisions based on the best available scientific evidence and information.
- ▲ We manage our resources effectively and efficiently to deliver value to the public.

Our Work

- ▲ We regulate in a fair, proportionate and transparent manner and target those who don't comply.
- ▲ We make a difference by working with others to build trust, networks and partnerships to deliver effective outcomes.
- ▲ We strive continuously for improvement and excellence through learning and development.

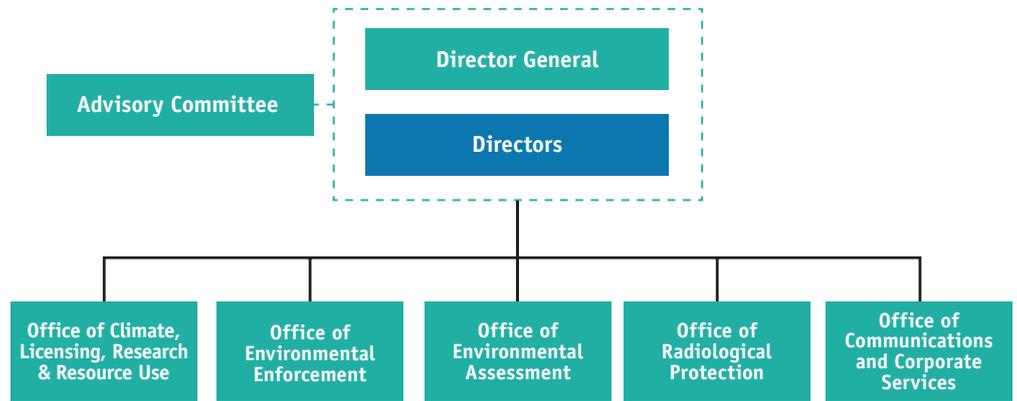
Our Service

- ▲ We are innovative, adaptive and open to new and flexible ways of working.
- ▲ We design and deliver services from the citizen's point of view.
- ▲ We provide our services in a manner that is competent, courteous and responsive.

Our Colleagues

- ▲ We work together to deliver effective outcomes.
- ▲ We support, trust and value our colleagues and empower each other to make decisions.
- ▲ We are open and honest with each other.
- ▲ We constructively challenge and encourage each other to do better.

EPA ORGANISATIONAL STRUCTURE 2015



In 2015 the work of the EPA was carried out by its five main Offices:

- ▲ The Office of Climate, Licensing, Research and Resource Use
- ▲ The Office of Environmental Enforcement
- ▲ The Office of Environmental Assessment
- ▲ The Office of Radiological Protection
- ▲ The Office of Communications and Corporate Services

More information on EPA activities, licences, publications and newsletters can be found on the EPA website at www.epa.ie



EPA BOARD OF DIRECTORS

(L to R): Gerard O’Leary (Director Office of Environmental Enforcement). Ann McGarry (Director, Office of Radiological Protection). Matthew Crowe (Director, Office of Environmental Assessment). Laura Burke (Director General). Micheál O Cinnéide (Director, Office of Communications and Corporate Services). Dara Lynott (Deputy Director General; Director, Office of Climate, Licensing, Research and Resource Use).



EPA ADVISORY COMMITTEE

The EPA is assisted by an Advisory Committee of 12 members who meet to discuss issues of concern and offer advice to the Board. The Director General of the EPA is, *ex officio*, a member and Chairperson of the Committee. The term of office of the Committee is three years.

The 6th EPA Advisory Committee was appointed by Mr Phil Hogan, TD, Minister for the Environment, Community and Local Government on 13 February 2013.

Back Row (L to R):

Cllr. John Sheahan (Fine Gael, Kerry County Council, *nominated by the Association of County and City Councils*); Dr. John Cuddihy (HSE, *nominated by Directors of Public Health of HSE*); Prof Colin O'Dowd (NUI Galway, *nominated by the Royal Irish Academy*); Mr. Pat Farrell (IFA, *nominated by the Irish Farmers Association*); Mr. Martin Hogan (Cliste Consulting, *Ministerial appointee*); Mr. Tom O'Reilly (Committee Secretary)

Front Row (L to R):

Dr. Sharon McGuinness (HSA, *nominated by the Health and Safety Authority of Ireland*); Mr. David Ball (Consultant, *nominated by the Irish Environmental Network*); Ms. Laura Burke (Chairperson); Mr Dara Lynott (EPA Deputy Director General); Ms. Elaine Nevin (CEO Eco Unesco, *Ministerial appointee*)

Missing from photo:

Ms. Deirdre Lyons (IDA, *nominated by the Industrial Development Agency*); Elizabeth Delahunty (ClearStream Technologies Ltd, *Ministerial appointee*); Dr. Aine Ryall (UCC, *Ministerial appointee*)

// Implement effective regulation and environmental compliance systems to deliver positive outcomes for people and the environment and target those who don't comply. //

1

REGULATION

1.1 Licensing

1.2 Enforcement

1.3 Guidance

The EPA licences activities to ensure that their emissions do not endanger human health or harm the environment.

1.1

LICENSING



The Environmental Licensing Programme has a wide remit, which includes the authorisation of industrial, waste, waste water, GMO, VOC, historic landfill, Air Pollution Act Appeals and dumping at sea activities. This work incorporates Environmental Impact Assessment and Appropriate Assessment as required by the Habitats Directive. The ELP processes applications for licences, permits, consents and authorisations for a range of activities, and also supervises notification procedures for end-of-waste and by-product.

IMPLEMENTATION OF THE INDUSTRIAL EMISSIONS DIRECTIVE

The Industrial Emissions Directive (IED) brought in new activities which required existing IPC and waste licences to be amended and new installations licensed by July 2015. Work continued on identifying these installations and notifying them of their new obligations, and applications received are being processed.

The web service, developed to implement the new IED, was extended to allow for three further processes for Licensees: Applications to Transfer a Licence, Alterations to Licence Requests & Technical Amendments and BATC self-assessment for reviews.

Work continues on extending the web service to include electronic submission of licence applications and environmental reporting data, and updating the licence format to reflect IED requirements.

BEST AVAILABLE TECHNIQUES (BAT)

Due to the transposition requirements of the IED (2012/75/EU), the existing EPA BAT notes apply to IPC and Waste activities. BAT requirements in relation to IED activities are addressed via existing BAT reference documents and Commission Implementing Decisions on BAT Conclusions. Eight Commission Implementing Decisions on BAT Conclusions have been published to date. Where a Commission Implementing Decision has not been published for an IED activity, the BAT-associated emission levels in the existing EPA BAT notes apply.

EMISSIONS TRADING

GHG Permits and EU ETS Compliance Cycle

The EPA is the enforcement and implementation Authority for the Emissions Trading Regulation, and implements Union-wide rules for harmonised free allocation of emission allowances designed to reduce free allocation over time. This is a key tool to move us to a carbon neutral, climate resilient society.

There were 96 industrial (stationary installations) with reportable emissions for 2014 and Ireland achieved 100% compliance under the 2015 reporting and surrendering cycle of the EU ETS for all stationary operators.

The amendments made to ETS Aviation legislation in April 2014 changing the scope of EU ETS meant that only 18 aircraft operators had reporting obligations in respect of flights in 2013 and 2014 by 31 March 2015. All but one aircraft operator reported on time and surrendered the necessary allowances by end April 2015. The exception was a bankrupt US based airline and the EPA continues to work with the US court appointed liquidator towards a resolution of this case.

The EPA completed the online Article 21 Report (Annual questionnaire on the implementation of the ETS Directive) and submitted it to the Commission via EIONET for the 30 June 2015 deadline.

Union Registry for EU Emissions Trading and International Carbon Commitments

The Union Registry is used as the compliance tool for regulated installations and operators under the EU Emissions Trading Scheme which, in Ireland, covers close to 100 installations in the energy and industrial sectors. In addition, as described above, 18 of the aircraft operators administered by Ireland as part of the EU Emissions Trading Scheme remained with reporting and surrendering obligations in March and April 2015 respectively. These operators, both stationary and aviation, are legally obliged to open an account on the Union Registry to fulfil their compliance obligations in relation to carbon emissions. The EPA continues to assure the robust management of a system which holds up to an estimated €300 million of financial assets.

The Union Registry is also where Ireland demonstrates compliance with Kyoto Protocol and EU Effort Sharing Decision. The “true-up” period under Commitment Period 1 (CP1) 2008–2012 of the Kyoto Protocol expired on 18

November 2015. Before the end of the “true-up” period, Parties to the Protocol had to ensure that they retired a sufficient number of eligible units (i.e. units valid for the first commitment period) to cover their respective final CP1 emissions.

To demonstrate Ireland’s compliance with its commitments under Commitment Period 1 (CP1) 2008–2012 of the Kyoto Protocol, during 2015 the EPA:

- ▲ Completed Ireland’s LULUCF (Land Use, Land Use Change, Forestry) transactions for CP1 by issuing 17.9 million RMUs (removal units) for the activity Afforestation/ Reforestation and cancelling 1.6 million units for the activity Deforestation;
- ▲ Fulfilled the formal instructions of the Department of Environment, Community and Local Government to retire units equivalent to Ireland’s CO₂ liability for CP1;
- ▲ Submitted Ireland’s “True-Up” Report to the UNFCCC.

RADIATION PROTECTION LICENSING

Prior to any individual or organisation acquiring either a radioactive source or an irradiating apparatus, they must first obtain a licence from the EPA. At the end of 2015, 1,740 licences were held across a range of sectors, including dental, medical, industrial, educational and veterinary. Thirty-three licences were issued to new licensees in 2015, of which 13 were to dentists, four to vets, two to transport organisations, one to a distributor and 13 to licensees in the industrial sector. In 2015 60 licences were closed, where the licensee had to ensure that all licensed products were either properly disposed of or returned to the manufacturer or supplier.

New Online Radiological Licensing System

In March 2015, the EPA introduced an online licensing system for existing radiological licences. Radiological licensees were set up with the functionality to make amendments, renew and generate a licence within the EDEN system. The EPA successfully launched its first online programme in March, comprising 362 licence renewals. In June the ability to make an online application for a new radiological licence was added.

The International Atomic Energy Agency (IAEA) Peer Review Mission of Ireland’s framework for radiation safety acknowledged the new regulatory information management system as a good practice in meeting the international requirements for the responsibilities and functions of the regulatory body.

Licence Type	2015			
	Total Applications Received	Total PDs Issued	Total Objections Received	Total Decisions Issued
IED/IPC Licences (includes IE Waste)	41	34	29	32
Waste Licences	1	6	5	3
Waste Water Licences	0		N/A	120
Waste Water Certs of Authorisation	3		N/A	15
GMO Permits (Contained use)	25		N/A	29
GMO Permits (Deliberate release)	0		N/A	0
Historic Landfill Certificates	4		N/A	0
Dumping at Sea Permits	5		N/A	5
Certificates of Registration (Waste)	37		N/A	24
VOC Permits	1	1	0	1
Radiation Licences	391	N/A	N/A	393
TOTALS	508	41	34	622

Table 1: Licensing Programme Tasks 2015



Tasks	Total Tasks Assessed 2015
Article 11 Requests	86
IE/IPC Technical Amendments	69
Initiated IE Amendments	45
IE LCP Initiated Amendments	17
Waste Technical Amendments	7
Waste water Technical Amendments	13
Dumping at Sea Technical Amendments	1
Article 27 Requests (by-product)	26
Article 28	2
EMA (GMO)	1
Directive 2009/41/EC	1
EIA Assessments on Applications	35
Planning Correspondences Examined	646
TOTAL	949

Table 2: Environmental Licensing Programme Other Regulatory Tasks 2015

1.2

ENFORCEMENT

The EPA implements and enforces environmental and radiological protection legislation in Ireland

CLEAN WATER

The EPA is now the environmental regulator for Irish Water, which is responsible for the delivery of water services in Ireland. Water services infrastructure in Ireland is suffering from decades of underinvestment and, while improving, is not yet meeting the standards necessary to ensure that all drinking water supplied is safe and secure and that waste water is adequately treated prior to discharge. The EPA has set priorities for Irish Water to bring about the elimination of long term boil water notices, removing drinking water supplies from the Remedial Action List.

Municipal Waste Water Discharges

The *Urban Waste Water Treatment Report* published in 2015 showed progress towards improving the protection and restoration of water quality, and the prevention of environmental pollution from the impacts of waste water discharges. The key findings of the report were as follows.

Infrastructure and effluent quality:

- ▲ 143 out of the 174 large urban areas (82%) achieve the mandatory EU quality standards. This figure is up 8 percentage points in two years.
- ▲ 45 areas had no waste water treatment and discharged raw sewage. Over half of these are in three counties (Cork, Donegal and Galway).

Management and operation of plants:

- ▲ Operational improvements are required at 57 urban areas, which have sufficient treatment capacity but failed to meet the effluent quality standards. This is down from 80 urban areas the previous year.
- ▲ 21% of incidents at waste water plants were attributed to issues surrounding operation and maintenance.

The receiving environment:

- ▲ Waste water discharges contributed to poor bathing water quality at seven designated bathing waters in 2014, including Youghal and Rush.
- ▲ There is just one seriously polluted river site (Bredagh, Moville) where pollution is caused by urban waste water discharges. This is down from six in 2013.

Domestic Waste Water Treatment Systems (Septic Tanks)

The EPA prepares the national inspection plan for septic tanks. Inspections are carried out by local authorities. Since the inspections began in 2013, almost half of the systems inspected have been found to be non-compliant. The review of the period 1st July 2013 to 31st December 2014, published in 2015, found that:

- ▲ 1,559 first time inspections were carried out by local authority inspectors.
- ▲ 54% of domestic waste water treatment systems passed inspection.
- ▲ More than half the failures were due to lack of de-sludging.
- ▲ 85% of the inspected systems are now compliant with the regulations, following remediation work by householders.

In 2015, the EPA also published the second National Inspection Plan 2015–2017: Domestic Waste Water Treatment Systems, which covers a three year period. Three working groups on site selection, enforcement policy and engagement have been established to provide practical assistance and guidance to local authorities.

Drinking Water

The EPA *Drinking Water Report 2014* showed a high level of compliance with the microbiological and chemical standards. While this indicates that the majority of Ireland's water supplies are safe, further improvements are necessary to improve the security of the supplies and avoid long term boil water notices into the future.

Monitoring of public drinking water in Ireland showed that:

- ▲ 99.9% of samples comply with the microbiological standards and
- ▲ 99.4% of samples comply with the chemical standards.

There were 6,000 people on a long term boil water notice at the end of the year, down from a peak of 23,000 in early 2015.

The EPA Remedial Action List identified 112 supplies – serving 770,000 consumers – that were in need of improvement to ensure the safety and security of these supplies. Overall, the pace of investment in water treatment must continue to increase so that Irish Water can eliminate the risk of *Cryptosporidium* and the risk of long term boil water notices.

The EPA has required Irish Water to prepare comprehensive national strategies to address key priorities such as disinfection, disinfection by-products, lead, pesticides and water safety planning. In 2015, the EPA issued 31 legally binding directions to Irish Water.

PREVENTING ENVIRONMENTAL DAMAGE

Environmental Liabilities Risk Assessment and Financial Provision

It is a priority for the EPA to ensure environmental liabilities associated with potential incidents, or the closure of potentially polluting activities, are managed by licensees through the necessary investment in remediation and financial provision.

The EPA continues to increase the number of financial provisions covering environmental liabilities, thus reducing the risk to the State from incidents and site closures. At the end of 2015:

- ▲ 123 closure plans were agreed, covering liabilities of €398 million.
- ▲ 95 assessments of potential incident costs were agreed, covering liabilities of €216 million.
- ▲ 49 sites had financial provisions secured, covering liabilities of €110 million.
- ▲ EPA Guidance on Financial Provision for Environmental Liabilities was published in October 2015 and this is facilitating an increased number of financial provisions to be secured.

MARKET SURVEILLANCE AND CHEMICALS IN THE ENVIRONMENT

Chemicals (Including Solid Fuel Regulations)

To reduce the level of harmful chemicals that the public can come in contact with, during 2015 the EPA assessed 18 RAPEX (the EU rapid alert system that facilitates the rapid exchange of information between Member States and the Commission on measures taken to prevent or restrict the marketing or use of products posing a serious risk to the health and safety of consumers) Notifications in relation to REACH (8), POPs (7), RoHS (2) and F-gases (1). Follow up inspections of key economic operator premises (importers, wholesalers and retailers) were carried out in the Cork region (13 inspections), Limerick region (10 inspections) and Dublin region (27 inspections).

100 paint labelling inspections under the Paint Directive were carried out in major retailer premises in the Cork, Limerick and Dublin regions. No non-compliances were observed.

20 household items were procured during December 2015 for testing for certain hazardous substances restricted under the Persistent Organic Pollutants and REACH Regulations.

There were 25 coal bagging operators and 51 solid fuel suppliers on the fuel register at the end of 2015, under the Solid Fuel Regulations (S.I. 326 of 2012).

Waste Electrical and Electronic Equipment and Batteries Regulations

To ensure that this waste stream is managed correctly, the EPA

- ▲ Verifies WEEE waste management plans prepared by producers
- ▲ Disseminates guidance
- ▲ Inspects retailers and distance sellers

In 2015 the EPA carried out a total of 165 announced and unannounced inspections of producers under the European Union (Waste Electrical and Electronic Equipment) Regulations 2014 and the European Union (Batteries and Accumulators) Regulations 2014. In addition 80 desk-top audits of websites of distance sellers were undertaken.

A non-compliant EEE producer was convicted of 15 breaches of the WEEE Regulations in September. Significant fines totalling €22,500 were imposed and the EPA costs awarded.



Ozone Depleting Substances and Fluorinated gases

As part of the EPA's work to significantly reduce the use of ozone depleting substances we:

- ▲ Inspected the newly obligated sector of refrigerated trucks and trailers.
- ▲ Increased by 12.5% the number of Prior Annual Notifications (PAN) issued, to 126.
- ▲ Contacted 179 potentially unregistered contractors asking them to apply for a PAN or state that they did not require one (as they did not move waste gases).
- ▲ Inspected 179 ODS and F-gas end users and contractors, focusing on the larger multiple end users e.g. grocery retail chains, hotel and hospitality groups.

ENVIRONMENTAL INSPECTIONS

2015 Inspections & Audits

Activity	Number of inspections
Industrial & Waste Licences	1,310
Urban Waste Water Discharge Licence	265
Drinking Water Treatment Plants	69

Table 3: Number of inspections by sector

INDUSTRIAL AND WASTE LICENCE ENFORCEMENT

The management and control of risk at industrial and waste sites was achieved in 2015 by the following enforcement activities:

- ▲ The completion of more than 1,300 planned inspections.
- ▲ Resolving 218 compliance investigations concerning site specific issues.
- ▲ Tackling priority issues through a sectoral enforcement approach and targeting enforcement action at identified problems on priority sites.
- ▲ The hearing of 15 prosecutions.

The EPA received 1,123 complaints in relation to industrial and waste licensed facilities in 2015. Figure 1 shows the number of complaints received by issue/theme and Figure 2 the number of complaints received by sector. The vast majority (62%) of complaints received relate to odours; noise is the second most complained of issue (15% of complaints). The vast majority of complaints received are made in relation to the food & drink or waste industries. Securing compliance at licensed facilities which receive complaints is a priority for the EPA. Actions include opening compliance investigations, conducting additional inspections, monitoring or odour surveys, and escalating enforcement action where necessary.

Reports on Waste Enforcement for both 2013 and 2014 were published in 2015 and highlighted the main enforcement activities and risks associated with the waste sectors. These are available on the [EPA website](#).

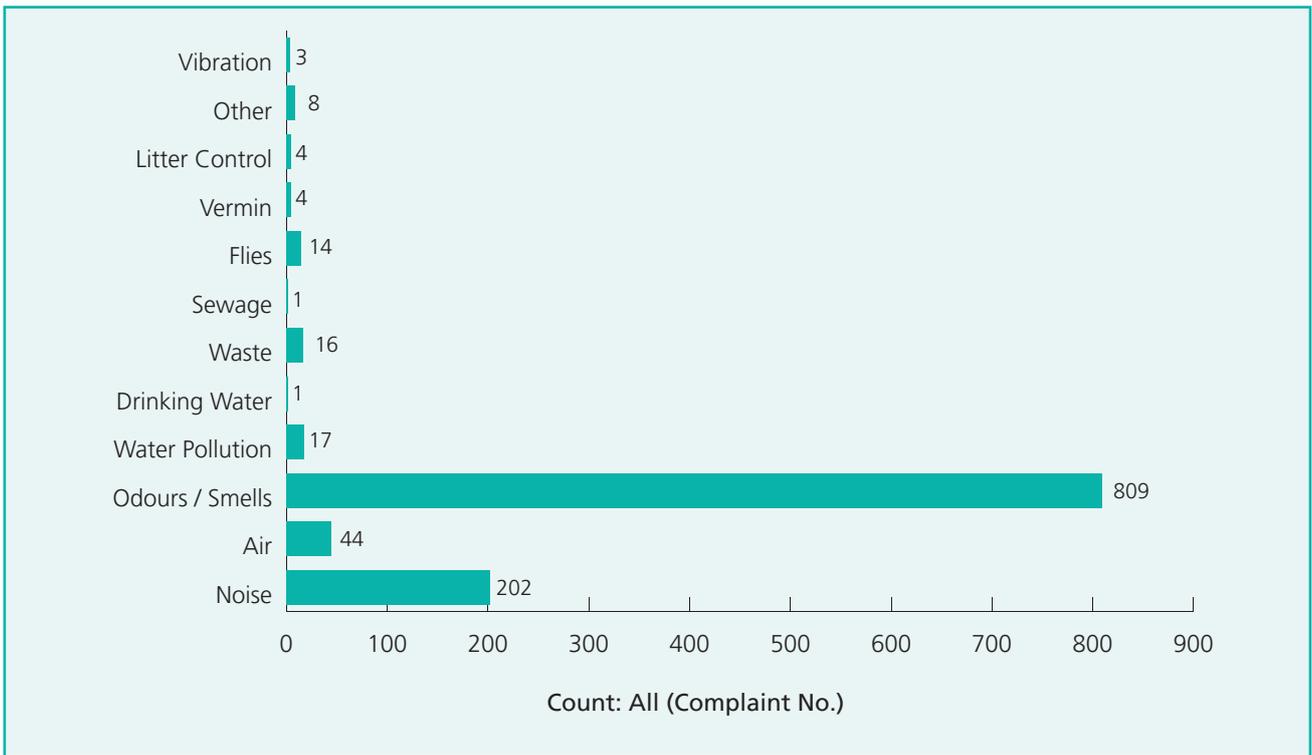


Figure 1: Complaints in 2015 by issue/theme

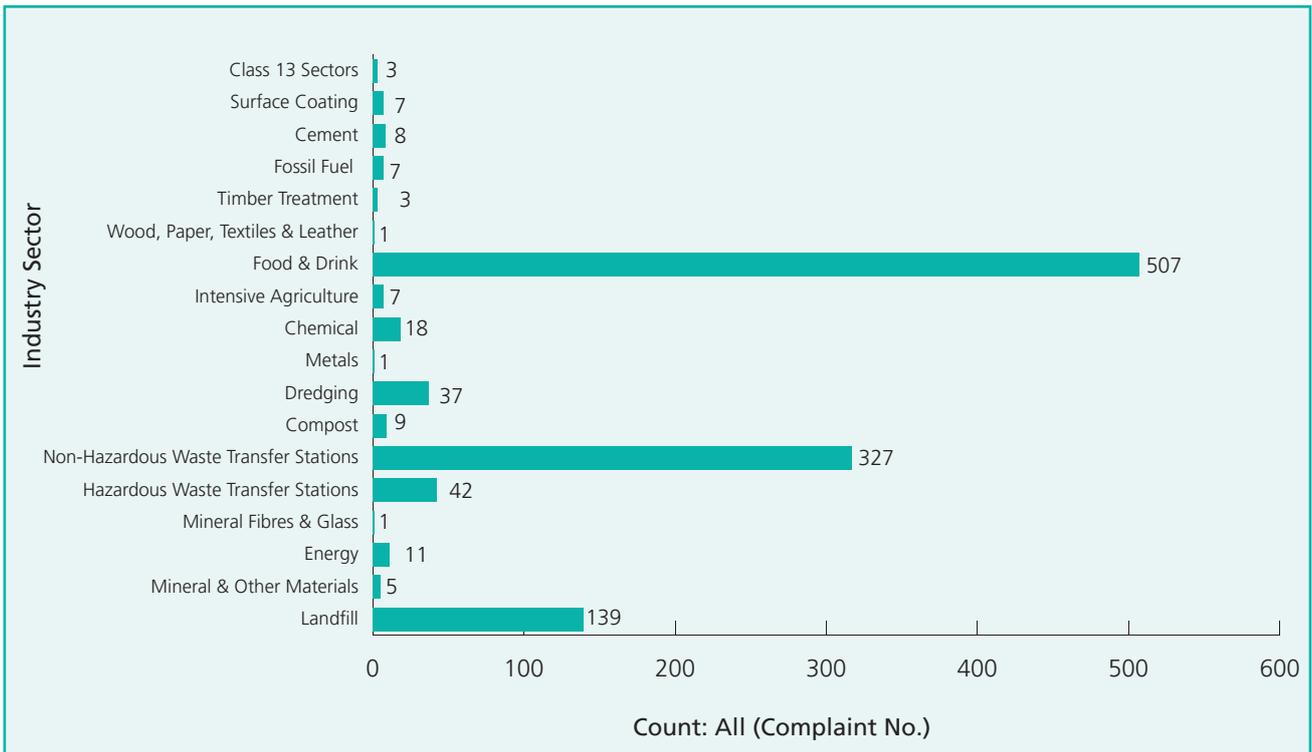


Figure 2: Number of complaints received by sector

RADIATION PROTECTION INSPECTIONS

The EPA carries out radiation protection inspections to assess both the standards of radiation protection across the various sectors and the level of compliance by licensees with national legislation and licence conditions. The selection of licensees to be inspected each year is based on a number of criteria, including the radiological risk associated with the licensees' activities, the time elapsed since their last inspection and any incidents reported within their sector of operation. Seventy three radiation protection inspections, and two security audits, carried out with the assistance of An Garda Síochána's National Crime Prevention Unit, were completed in 2015 (Table 4). Good levels of compliance were generally found.

Three of the inspections were carried out during the international peer review of Ireland's framework for radiation safety. EPA inspectors were witnessed carrying out radiation safety inspections of a radiotherapy department in a hospital, an industrial irradiation facility and a radiopharmaceutical manufacturing facility. The review team noted in its final report that EPA inspections are comprehensive, concentrated in matters relevant to safety and that they contribute significantly to the improvement of safety and enhancing the safety culture at the regulated facilities.

Following a surveillance visit by the Irish National Accreditation Board in June, the EPA was successful in retaining accreditation against the international standard ISO 17020 for Conformity Assessment for bodies performing inspections.

Licensee Sector	Risk Category	Number of completed inspections
Dental	Low	1
Vets	Low	7
Distributors	Medium	2
Industrial	Medium/High	37
Medical	Medium/High	20
Non-licensees	-	6
Security	-	2
Total		75

Table 4: Radiation protection licensee categories and inspections undertaken during 2015

CONTROL OF AIRCREW EXPOSURE

Under S.I. No. 125 of 2000 the holder of an air operator's certificate is required to evaluate doses received by aircrew to determine if measures to control exposure to cosmic radiation are warranted and to report the results to the EPA. For 2015, the information received from seven licensed air operators showed that 276 individuals received doses over 4 mSv; but no doses exceeded the 6 mSv threshold above which air operators must organise the working schedules of air crew with a view to reducing their exposures. Since monitoring of aircrew began in 2003 there has been a consistent yearly increase in the number of aircrew receiving doses in excess of 1 mSv (Figure 3). This can be attributed to an increase in the number of aircrew required for the operation of new and existing routes as the demand for air travel increases.



Figure 3: Number of aircrew receiving radiation doses greater than 1 mSv



LEGAL PROCEEDINGS

Prosecutions

In 2015 there was an increase in the number of prosecutions heard by the courts. Of the 15 prosecutions heard, 11 resulted in convictions, 3 defendants were given the benefit of the Probation Act and 1 case was proven but no conviction was recorded. The jury was directed to acquit the second defendant in a DPP prosecution and that acquittal is being appealed by the DPP.

No. of District Court prosecutions heard	14
No. of DPP cases heard	1
Fines awarded in District Court	€82,100
Fines awarded in DPP cases	€20,000,000
Costs awarded in District Court	€132,536.89
Costs awarded in DPP cases	€0
Total Fines & Costs	€20,214,636.89

Table 5: Legal enforcement activities in 2015

The EPA produces advice and guidance to industry and the public covering a wide range of environmental activities to ensure compliance with best practice.

1.3

GUIDANCE

GUIDANCE ON FINANCIAL PROVISIONS

Guidance on Financial Provisions for EPA licensed activities was published in 2015. This guidance sets out, for the first time, detailed and practical criteria for establishing secure and sufficient provisions for environmental liabilities and closure costs that will be available for use in the event of an insolvency process.



PRODUCER RESPONSIBILITY INITIATIVES (WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT AND BATTERIES)

Twelve guidance documents were published in 2015 to take into account changes under the European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014) and the European Union (Batteries and Accumulators) Regulations 2014 (S.I. No. 283 of 2014) as amended.

The EPA also coordinated (through the Network for Ireland's Environmental Compliance and Enforcement (NIECE)) the production of an updated chapter in the Local Authority Enforcement Guidance Manual on the European Union (Waste Electrical and Electronic Equipment) Regulations 2014 (S.I. No. 149 of 2014).

STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

SEA and Climate Change Guidance Note for Planning Authorities was published in 2015. In addition, a STRIVE funded Research Project produced *Guidance on Developing and Assessing Alternatives in Strategic Environmental Assessment*.

The EPA's *SEA Spatial Information Sources* continued to be updated during 2015 in association with NUI Maynooth. This environmental spatial data inventory provides a useful resource to inform the preparation of SEA Environmental Reports and the associated environmental assessments. Data sources/links include Air Quality, Climate, Biodiversity, Flora, Fauna, Geology, Soils, Hydrology and Water Quality. The SEA Scoping Guidance document was also updated with information on best practice, updated legislation, guidelines and data sources.

OZONE DEPLETING SUBSTANCES (ODS) AND FLUORINATED GREENHOUSE GASES (F-GASES) REDUCTIONS AND CONTROL

As part of the EPA's work to significantly reduce the use of ozone depleting substances a series of nine guidance notes on the revisions to the F-gas regulations for end users and Refrigeration and air-conditioning contractors were published by the EPA in 2015.

RADIATION EMERGENCY EXERCISES

The EPA runs an annual programme of radiation emergency exercises to maintain and develop staff expertise. In 2015, the EPA participated in six international radiation emergency exercises organised by the International Atomic Energy Agency (IAEA) and the European Commission (EC). The EPA also provided training and support to other agencies carrying out radiation emergency exercises. A joint exercise was held with Met Éireann, training and assistance was provided to Fire Officers carrying out a radiation emergency exercise and support was given to the Civil Defence for their national emergency exercise.

RADIATION PROTECTION ADVICE

The EPA is required to establish and maintain a register containing the names of persons and corporate bodies approved as persons or bodies who may be appointed by licensees to act as Radiation Protection Advisers (RPA). These advisers play an important role in radiation safety for licensed activities. During 2015, six new applications and seven applications for re-approval were received. At the end of 2015, there were 41 individuals and nine corporate bodies on the EPA's RPA register.

APPROVAL OF DOSIMETRY SERVICES IN IRELAND – GUIDELINES FOR APPLICANTS

Dosimetry services providing a service in Ireland in accordance with S.I. 125 of 2000 as amended by S.I. 152 of 2012 must be approved by the EPA. These guidelines are for applicants seeking approval of dosimetry services in Ireland.

TRIPLE RINSE GUIDE FOR EMPTY PESTICIDE AND DAIRY HYGIENE CONTAINERS

This Good Practice Guide provides guidance for the safe and environmentally friendly recovery of empty plant protection product and dairy hygiene containers. It was jointly prepared by the EPA, Teagasc and the Department of Agriculture and the Marine.

HOME HEATING TIPS

This summary document provides guidance to members of the public on how to minimise the impact of home heating on the environment, particularly in relation to the burning of solid fuels such as wood and peat.

Additional advice and guidance documents are published on the EPA website at <http://www.epa.ie/pubs/advice/>.





“ Provide high-quality, targeted and timely environmental data, information and assessment to inform decision making at all levels.”

2

KNOWLEDGE

2.1 Monitoring
and Assessment

2.2 Research

2.3 Reporting



2.1

MONITORING AND ASSESSMENT

The EPA provides evidence based assessment and timely information to all our stakeholders, to support action to protect and manage the environment.

AIR QUALITY

The annual national air quality monitoring programme, required to meet the EU CAFÉ requirements, was completed in full for 2015. The configuration of the network for 2015 is shown in Figure 4.

The report *Air Quality in Ireland 2014 – Key Indicators of Ambient Air Quality*, launched at the Clean Air Conference in September, showed that air quality in Ireland compares favourably with other EU member states; all parameters measured at the ambient air quality network monitoring sites were below limit and target values set out in EU and Irish legislation. However, values of particulate matter (PM₁₀ and PM_{2.5}) and ozone were higher than the tighter WHO Air Quality Guideline values. Values for polycyclic aromatic hydrocarbons (PAH) were above the European Environment Agency (EEA) reference levels. While the EU has introduced and implemented a range of legal instruments to improve air quality, these standards are still not in line with the tighter WHO air quality guidelines and the EPA is now calling for movement towards the adoption of these stricter guidelines, in particular for particulates and ozone, as the legal standards across Europe and in Ireland.

During 2015, the EPA continued to upgrade its air quality IT infrastructure and maintain the Air Quality Index for Health (AQIH) online system, to ensure that up-to-date information is made available to the public, and hourly data is provided to the EEA.

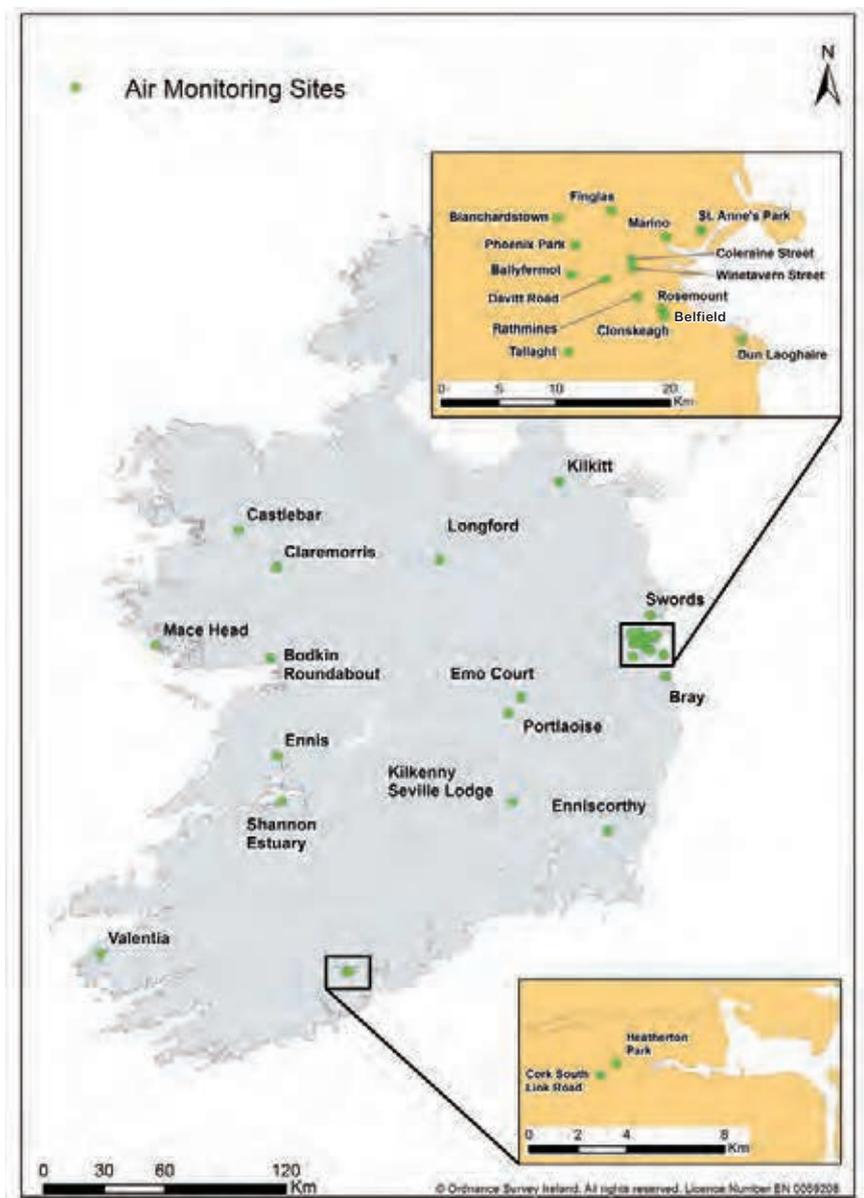


Figure 4: Air monitoring sites

The EPA is also reviewing the overall approach to air quality monitoring to provide for more comprehensive information on air quality at a local level.

An emergency response protocol to address the management actions to be taken in the event of any air quality related incidents remains in place. The EPA also continued to liaise with stakeholders including the HSE, Met Éireann, DECLG and the Government Task Force on Emergency Planning. The development of a new national ambient air monitoring programme from Ireland under Section 65 of the EPA act 1992 (as amended) was progressed throughout the year.

WATER QUALITY

Water Framework Directive (WFD)

The objectives of the Water Framework Directive (WFD) are to protect all high status waters, prevent further deterioration of all waters and restore degraded surface and ground waters to good status. The EPA has been assigned a number of tasks under the *European Communities (Water Policy) Regulations*,

2003, which come under the category of “coordination and oversight” of the Irish WFD monitoring programme. This role was enhanced by the the European Union (Water Policy) Regulations 2014 which gave the EPA a wider coordination role of the technical assessments underpinning the actions or programme of measures that will be undertaken under the plan.

To support the delivery of this enhanced role, the *Catchment Science and Management Unit* was established in the EPA and has been working to characterise the Irish water environment. Characterisation is the process by which the physical attributes of water bodies and the impacts of pressures from human activities are assessed to assign the level of risk of not meeting WFD objectives to waterbodies. This information will be used to target actions to address water quality issues in the development of new river basin management plans that are to be finalised in 2017. During 2015 the technical assessments and their processes were developed and 27% of the 583 sub-catchments in the country had been characterised at the end of 2015.

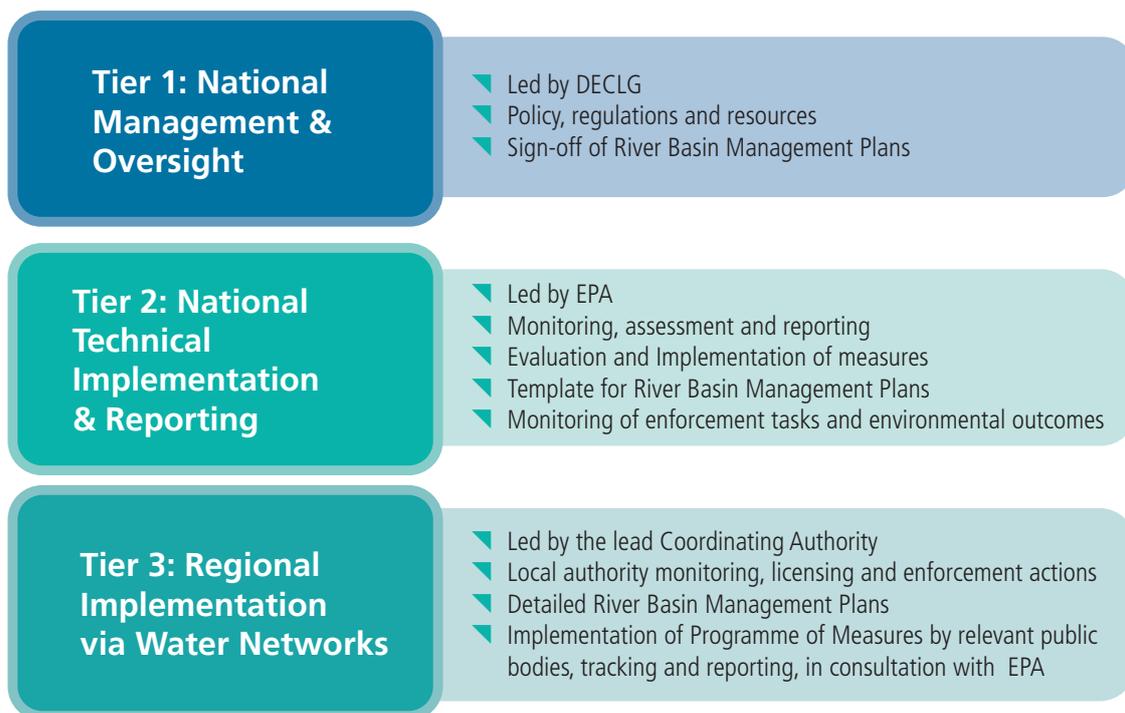


Figure 5: New governance arrangements for Water Framework Directive implementation

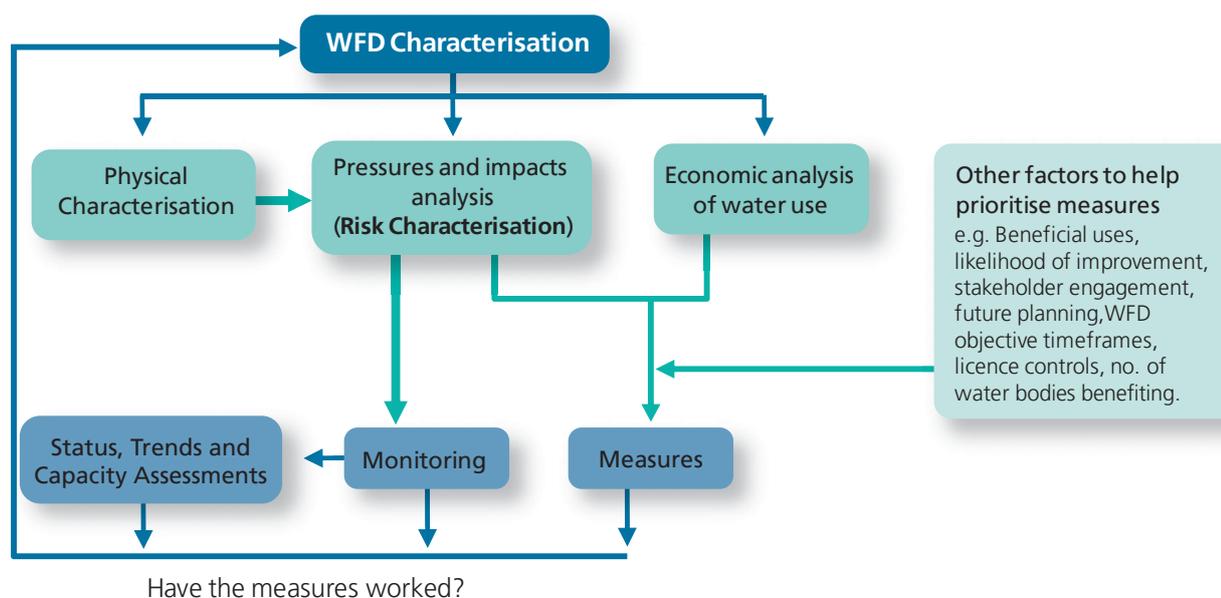


Figure 6: Characterisation in the WFD Framework

The EPA also established a new National Implementation Group involving local authorities and a range of national bodies and authorities, to help improve technical coordination and implementation of the Water Framework Directive. This group set up a number of Working Groups during 2015 to support its work.

Water quality work undertaken in 2015 included the following:

- ▲ Twelve rounds of surface water physico-chemical sampling gave rise to analyses involving 8,472 samples from rivers and lakes, and 2,602 from estuaries.
- ▲ Three rounds of groundwater samples were taken from 270 wells and springs.
- ▲ Water sampling details are provided in Table 6.
- ▲ The EPA undertook ecological surveys at:
 - ▲ 1,025 river sites on 488 rivers and streams
 - ▲ 65 lakes at over 3000 sampling stations
 - ▲ 80 transitional and coastal water bodies at 400 sampling stations.

Of the 1,025 river sites surveyed, 964 were operational/ investigative and 61 were long term surveillance sites. Macroinvertebrate Q value assessments were carried out at the 1,025 sites, while seasonal phytobenthos sampling was carried out at 190 river sites in 2015. A total of 227 River Hydromorphological Assessment Technique (RHAT) surveys were also carried out (Table 7)

	Number of samples
WFD SURVEILLANCE	
WFD Surveillance Lakes	1,526
WFD Surveillance Rivers	2,304
WFD Surveillance Priority substances	396
WFD OPERATIONAL	
	4,246
WFD GROUNDWATER	
	803
WFD ESTUARINE	
	2,602
OSPAR	
	144
Total number of samples	12,021

Table 6: Total Number of water samples analysed in 2015

	Operational/ Investigative	Surveillance	Total
Macroinvertebrate Q Value Assessments (No. Sites)	964	61	1,025
Phytobenthos Processing & Assessments (Samples)	-	190	190
River Hydromorphological Assessment Surveys (RHAT)	181	46	227

Table 7: Biological monitoring of rivers in 2014

Hydrometric Programme

The EPA continues to monitor the impact of surface water abstractions on river flows and to provide hydrometric data to support national and international reporting obligations, water resource planning and management, flood risk management, infrastructure design and a variety of other activities.

In 2015 the EPA carried out 3,471 assessments of surface water level/flow and groundwater levels around the country. These assessments primarily focused on the existing EPA-Local Authority network of sites, but also included targeted flow measurements, for example to support the establishment of 95 percentile flows for inclusion in waste water treatment plant licences. The frequency of site visits is tailored to the site requirements and natural variability in the river channel, e.g. a stable channel with a long time series of data will typically require fewer site visits than a recently activated station with a highly dynamic channel bed. The data are incorporated and processed in a central software system, and are available for download via the EPA's HydroNet webpages (<http://hydronet.epa.ie/introduction.htm>).

During 2015 the EPA:

- ▲ Completed the upgrade to the industry leading WISKI 7 operating system for storage, analysis and dissemination of hydrometric data.
- ▲ Provided updated estimates of 95 percentile flow statistics, to facilitate assimilative flow calculations for 53 Waste Water Treatment Plant licences.
- ▲ Made the national hydrometric dataset for EPA-Local Authority sites available to the OPW, to support the Flood Study assessments carried out under the various regional CFRAMS programmes.
- ▲ Commenced work on a review of the National Hydrometric Programme, which is due to be completed in 2016.
- ▲ Put in place a framework agreement which will result in the surface water hydrometric network being fully upgraded to telemetry during 2016.
- ▲ Provided updated estimates of flow statistics to facilitate assimilative flow calculations to inform licensing decisions.

Groundwater

The EPA completed reports on the hydrogeological aspects of groundwater dependent terrestrial ecosystems and groundwater body characterisation to inform characterisation risk assessments being carried out by the EPA. The EPA also completed an update of groundwater WFD status and completed work on Tier 1 groundwater body characterisation to support WFD characterisation.

Groundwater quality monitoring was undertaken for three sampling rounds at the WFD groundwater network (276 sites) in 2015. The generation and processing of data from the groundwater level and spring flow network was undertaken. The groundwater quality and quantitative data is used in the WFD status and trends assessments, and for the Nitrates Derogation and other reports.

ENVIRONMENTAL NOISE DIRECTIVE

The EPA, as the designated national body for the Environmental Noise Regulations, commenced preparatory work with the noise mapping bodies on the development of the next round of strategic noise maps required under the Environmental Noise Directive. This work will continue over the next two years and will result in updated or revised maps being available for the major transport related noise sources including major road and rail lines.

STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA) DIRECTIVE

During 2015, the EPA made 33 SEA submissions on Environmental Reports/Draft Plans and 10 SEA submissions on Amendments to Draft Plans. In addition, 51 Screening notifications and 42 scoping notifications were also received.

The EPA prepared submissions on key national and regional plan/programmes including the National Forest Programme; Rural Development Programme; Ireland's Forestry Programme; Shannon Integrated Framework Plan and the National Peatlands Strategy.

It also provided submissions at the SEA scoping stage of the following Plans: the National Strategic Plan for Aquaculture; Seafood Development Programme; Northern Ireland Marine Plan and the three Regional Waste Management Plans.

The EPA also participates in a number of Steering Groups to promote the integration of environmental considerations into national plans and programmes. These include the SEA groups on the Renewable Electricity Policy; Offshore Renewable Energy; Offshore Oil and Gas Exploration and the Sectoral Climate Adaptation Steering Group.

The EPA prepared submissions on key national and regional plans/programmes including:

- ▲ Water Services Strategic Plan (Irish Water),
- ▲ Food Wise 2025 (DAFM),
- ▲ Oil and Gas Exploration Programme - IOSEA5 (DCENR),
- ▲ Seafood Development Operational Programme (DAFM),
- ▲ National Strategic Aquaculture Plan (DAFM) and
- ▲ 3 Regional Waste Management Plans (DECLG).

It also provided submissions at the SEA scoping stage of a number of key Plans/Programmes including:

- ▲ the National Bio Energy Plan (DCENR),
- ▲ National (Climate) Mitigation Plan (DECLG),
- ▲ Waste Water Sludge Management Plan (Irish Water), and
- ▲ Lead Mitigation Plan (Irish Water).

The EPA also participates in a number of Steering Groups to promote the integration of environmental considerations into the development and implementation of key plans and

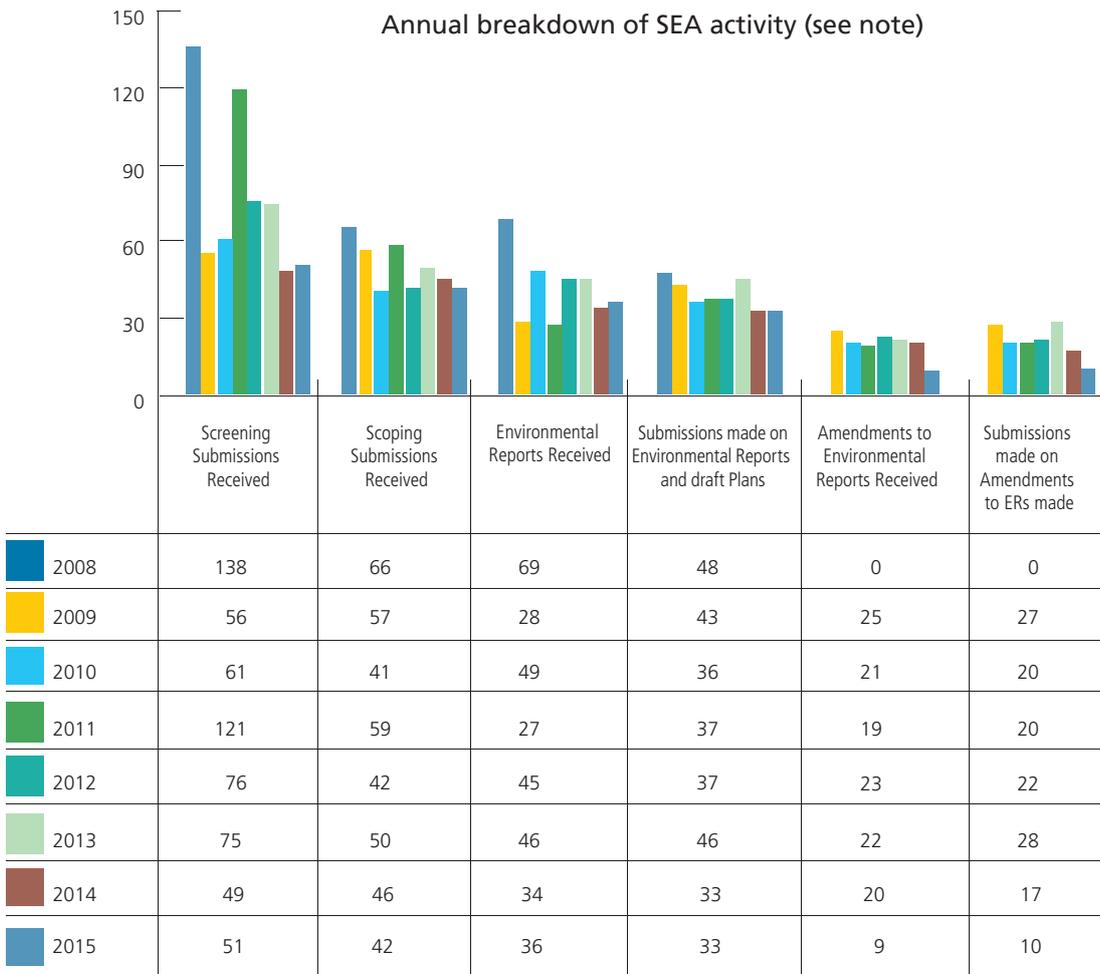


Figure 7: Annual breakdown of SEA activity (to end Q4 2015)

programmes. These include Food Wise 2025 Environmental Sustainability Committee, Peatlands Strategy Implementation Steering Group, National Bio Energy Plan, the National (Climate) Mitigation Plan and the Shannon Integrated Framework Plan Environment Working Group.

ENVIRONMENT LABORATORY SERVICES

The EPA laboratory services provide the analytical capability to support the implementation of national monitoring programmes and to support the EPA's core roles on licensing and enforcement. The laboratories, located in Kilkenny, Monaghan, Castlebar and Dublin, undertake the analysis of the physico-chemical parameters for rivers, lakes, ground waters and transitional waters for the WFD surveillance and other monitoring programmes. Each of the laboratories also provides monitoring and analytical services at licensed facilities and undertakes the auditing of waste water discharge licences. The laboratories in Castlebar, Monaghan and Kilkenny provided services to the local authorities in these regions during 2015.

A major milestone for the EPA laboratories in 2014 was the awarding of the single multi-site accreditation under ISO17025. The surveillance audit on that accreditation in late 2015 found only minor observations on the EPA's systems.

In addition, during 2015:

- ▲ The water laboratories analysed a total of 20,156 samples for a range of physicochemical analyses – together with a substantial number of samples for other more complex analysis – as part of the Water Framework Directive monitoring programme and enforcement check monitoring.
- ▲ The EPA completed the installation and commissioning of a new common Laboratory Information System for all of the water laboratories and the air laboratories. This system replaced individual systems in each of the four EPA laboratories and allows for more streamlined reporting on monitoring undertaken.

Intercalibration and Calibration Services

The total number of laboratories participating in the EPA's intercalibration programme increased, by three, to 147 in 2015. These include local authorities, Industrial Emissions Directive (IED) and contract laboratories, other laboratories supplying data to the EPA and also the EPA's regional laboratories. The sample preparation and distribution elements of the programme continue to be outsourced to an external laboratory.

The register of laboratories, provided for under Section 66 of the EPA Act, 1992, and based on performance of the individual laboratories in the previous year, is available for inspection at <http://www.epa.ie/pubs/reports/water/other/>

Instrument Calibration Service

The EPA's Calibration Service supports monitoring of radiation levels and radiation safety in the workplace by providing an accredited calibration service for a range of radiation protection instruments, including survey meters, contamination meters and electronic personal dosimeters.

In 2015, 547 radiation monitors were tested by the EPA's Calibration Service of which 24 were outside recommended tolerances. Instrument failure is normally simply due to wear and tear, which may not be noticed by the user if the instrument is not subjected to calibration tests.

RADIATION MONITORING

The EPA's 2015 radiation monitoring programme involved sampling and testing for radioactivity in air, drinking water, seawater, seaweed, sediments, fish, shellfish and other foodstuffs as well as the continuous measurement of ambient gamma dose rate at fixed monitoring stations around the country.

The findings of this monitoring programme showed that while the levels of artificial radioactivity in the Irish environment remain detectable, they are low and do not pose a significant risk to human health.

Radon Measurement Service

In 2015, the EPA radon laboratory measured radon in 1,224 homes. Of these 198 had radon levels above the level at which remedial action is recommended (National Reference Level of 200 Bq/m³). The maximum value measured was 5,200 Bq/m³ in a Co. Galway home. More detailed information of the radon measurements made in each county are published on the EPA's website at www.epa.ie/radiation.



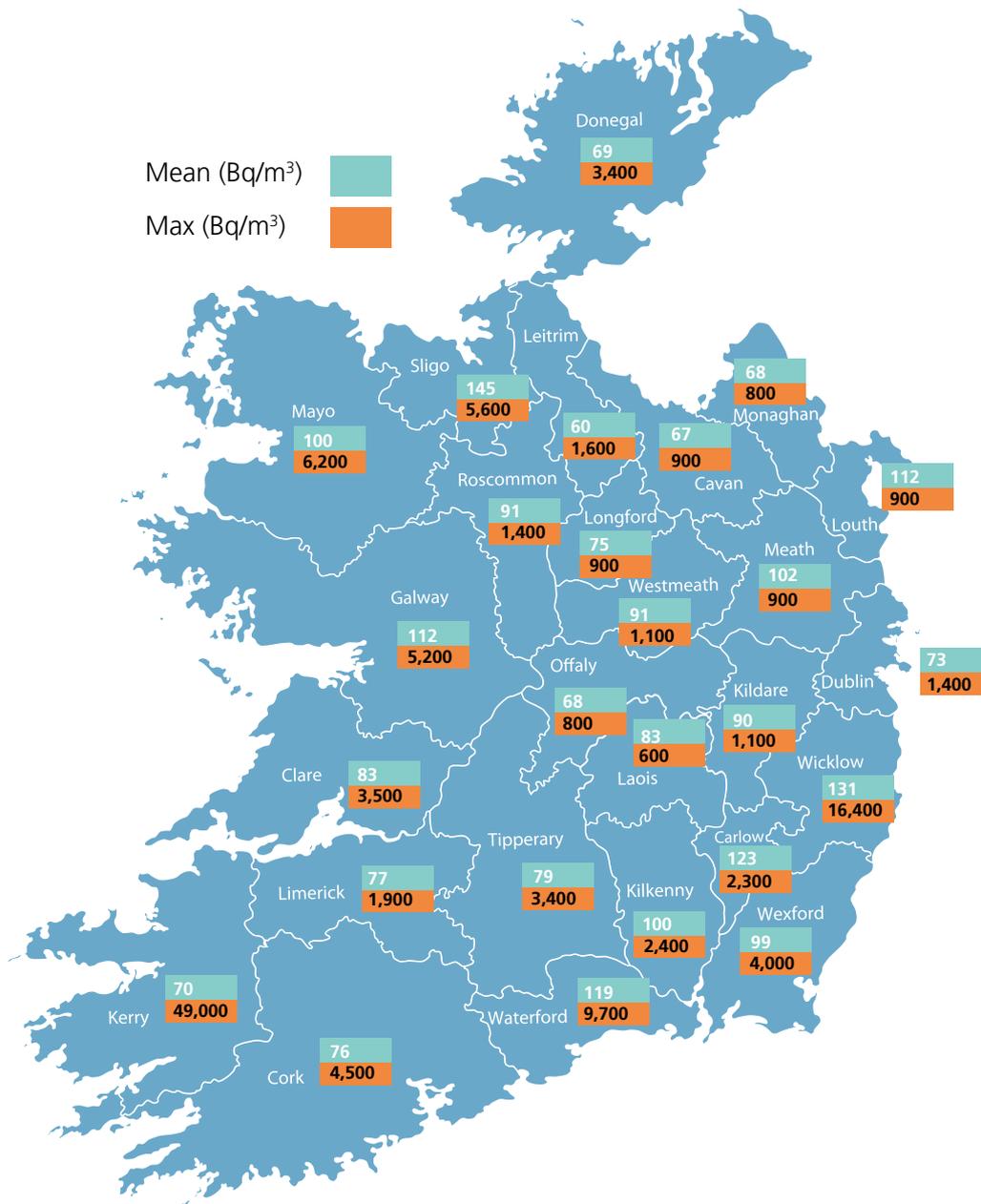


Figure 8: Summary Statistics for Radon measurements in Ireland up to 2015

Radioanalytical Services

The EPA’s radioanalytical laboratory is the national laboratory for the measurement of radioactivity and each year analyses a wide range of foodstuffs and environmental samples. This work is undertaken both in support of the EPA’s environmental radioactivity monitoring programme and on a contract basis on behalf of external clients. The contract analytical services provided during 2015 included the testing of Irish produce for compliance with the requirements of importing countries, testing of drinking water for compliance with EU regulations, testing of leakage from radioactive sources used in medicine, education and industry and testing of dredging samples for compliance with the requirements of the Dumping at Sea Act. In total, 1,415 samples were tested in 2015.

The EPA provides a certification service to exporters of Irish foodstuffs and other produce. The number of product certificates issued in 2015 was 3,330. All certificates indicated levels of radioactivity below required limits.

NATIONAL RADIATION MONITORING NETWORK

The EPA, with the assistance of Met Éireann, a number of local authorities and the Defence Forces, operates the National Radiation Monitoring Network. This network measures ambient gamma dose rate, radioactivity in air and provides for the collection of rainwater samples. During 2015, ambient gamma dose rate was measured at 15 stations and radioactivity in air was measured at 12 stations. No abnormal levels of radioactivity were observed in 2015.



Figure 9: National Radiation Monitoring Network locations

NUCLEAR FACILITIES ABROAD

Monitoring Developments in Nuclear Safety

The EPA is committed to working with international peers to enhance and improve radiation protection and nuclear safety worldwide and maintains active membership of a number of international bodies such as the International Atomic Energy Agency (IAEA), the Nuclear Energy Agency (NEA) and the European Nuclear Safety Regulators Group (ENSREG). In 2015, the EPA participated in an international workshop organised by ENSREG to review progress against National Action Plans under the post-Fukushima nuclear stress tests.

Throughout 2015, the EPA continued to advise the Government on developments at nuclear sites in the UK, including Sellafield, and their implications for Ireland, as well as on progress of the UK's plans to build new nuclear power plants and search for a geological disposal facility for its high activity wastes. As part of this work, the EPA maintains regular contact with the UK nuclear regulatory authorities.

In 2015, the EPA provided advice to Department of Community, Environment and Local Government in transposing the amended European Council Nuclear Safety Directive (2014/87/EURATOM of 8 July 2014). This amended Directive strengthens the power and independence of national regulatory authorities, sets up a European system of peer reviews on specific safety issues every six years and increases

transparency on nuclear safety matters by informing and involving the public. It is due to be transposed into Irish law by 2017.

RADIATION EMERGENCIES AND PREPAREDNESS

Under legislation and as agreed through multi-agency emergency plans, the EPA has a number of defined roles in emergency preparedness and response for nuclear accidents abroad, local radiological incidents and malign radiological events. The EPA's responsibilities under the National Emergency Plan for Nuclear Accidents (NEPNA) include measuring radioactivity levels in the environment and the food chain, assessing the potential impacts on the Irish population and environment and providing advice on protective actions to reduce radiation exposure.

In February 2015, the EPA was informed that elevated radiation levels had been detected in a consignment of scrap metal in Limerick. The material where the high readings originated was removed, segregated and made secure. After a thorough radiological assessment and manual search of two scrap metal consignments, a damaged lightning preventor (with five radioactive foils attached) plus two loose radioactive foils were discovered. The sources were removed to a safe location by the EPA inspectors where subsequent testing revealed the sources to be radium-226.

2.2

RESEARCH

Effective management of the environment is increasingly science-driven. Through our research and development programme, the EPA is generating the knowledge and expertise to identify pressures, inform policy and develop solutions to environmental challenges.



RESEARCH INITIATIVES HIGHLIGHTS

The EPA has the statutory responsibility for the overall coordination of environmental research in Ireland. This research, conducted in Irish institutions, has greatly assisted Ireland in meeting and addressing international obligations at EU and UN levels – from climate change to water quality, air quality and biodiversity.

The EPA research strategy for the period 2014–2020 was published in 2014 and the objectives of the strategy are to *Identify Pressures – Inform Policy – Develop Solutions*. Communicating the results of research throughout key arms of government is a key part of the programme’s contribution to progressing sustainable competitiveness in Ireland.

2015 Research Call

Following the annual research call, which was announced in late June, there were 171 applications received in the areas of Climate, Water, Sustainability and Green Enterprise.

Over 100 external and 34 EPA reviewers were involved in the evaluation process and a total of 43 projects were offered funding under the following pillars:

- ▲ 10 Climate projects
- ▲ 7 Water projects

- ▲ 17 Sustainability projects (including 2 projects co-funded with the HSE)
- ▲ 9 Green Enterprise projects

In addition to the above, a further four projects were awarded in conjunction with the Irish Research Council.

This represented a budget commitment from the EPA of over €8 million. Analysis of the turnaround time indicated that this was a very efficient process in that 95% of the grant awards were made within 20 weeks of the closing date of the research call.

Climate

The main focus of the new projects which will start in early 2016 is to support a number of key priorities in the thematic areas of (1) Greenhouse Gas emissions and removals, (2) Future Climate, impacts, vulnerability and adaptation, (3) Socio-Economic and Technological Solutions and (4) Air Science.

Water

The main focus of the new projects will be to develop solutions for identified priorities in the area of innovative water monitoring technology, freshwater hydromorphology and connectivity and to support water policy in particular in the area of transitional and coastal waters

Sustainability

The focus of the new projects will be to deliver knowledge and solutions to challenges in the areas of Resource Efficiency, Socio-economics and Biodiversity; further our understanding of peatlands (ecosystem services & mapping) and support the management of invasive species.

In the Health and Well-Being area two projects, co-funded with HSE, will support the *Healthy Ireland* initiative and others will support national efforts in relation to reporting of POPs and the National Radon Control Strategy.

COMMUNICATING RESEARCH

During 2015, a total of 25 new Research Reports were published. All our published reports can be viewed and downloaded from the EPA website. In total, the EPA has now published over 300 research reports, all of which are available on our website <http://www.epa.ie/pubs/reports/research/>.

A quarterly research newsletter is circulated to over 2,400 subscribers and a bi-monthly newsletter on research opportunities in the European Commission's Horizon 2020 programme is circulated to over 600 researchers and innovators.

The Research team have an active Twitter account which provides timely updates on research calls, publications and research events. The number of followers had increased by the end of the year by over 33% to more than 3,200. Follow us [@EPAResearch](https://twitter.com/EPAResearch).



The Research team also developed an interactive web application for exploring information about projects which have been funded in Ireland on Water Research. The DROPLET database contains details of approximately 450 research projects and there have been over 100,000 website hits to the database since its launch in June 2015.

The EPA provided some financial support to TV programmes *Eco-Eye* and *10 Things to Know About* featuring EPA funded research on microplastic pollution and Cryptosporidium treatment. The New Decade team which produced *10 Things to Know About* received an award in November at the European Science TV and New Media Festival in Lisbon for *Best Programme in the Women in Science* category. The chosen episode featured Dr. Lisa O'Donoghue (funded by the EPA) on the recycling of LCD screens.

NATIONAL LINKAGES

The EPA participated in a number of workshops and events in the preparation of new Science Strategy (Innovation 2020), which was launched in 2015. The research team also participated on a number of other cross-Agency initiatives including *Foodwise 2025* and the Interdepartmental Committee on Anti-Microbial Resistance being jointly led by Department of Health and Department of Agriculture. During 2015, the EPA also laid the groundwork for collaborative research programmes with both the Economic and Social Research Institute (ESRI) and the Health Service Executive (HSE).

INTERNATIONAL LINKAGES

Horizon 2020

The EPA supports Ireland's engagement with Horizon 2020 (H2020) through its participation in the Advisory Group of Experts for SC5 (Climate Action), as National Delegate and National Contact Point for this Challenge, and as a member of the H2020 National Support Network led by Enterprise Ireland. In addition, the EPA is participating in both the Climate and Water Joint Programming Initiatives (JPIs) and as task force members on two European Innovation Partnerships (Water and Raw Materials), which could offer potential opportunities for increased engagement with H2020. The EPA Director General (Laura Burke) is the Chairperson of the Advisory Group of Experts under SC5.

The EPA provides significant support to the research community via a number of means to help them compete for European funding. We have established a H2020 SC5 National Working Group that meet quarterly to discuss & provide feedback on the work programme. We facilitate partner search requests and have established a web-based catalogue of Irish experts and promote H2020 on the EPA webpages, social media and newsletters, etc. In addition, the EPA reviews proposals, facilitates queries, meets with researchers (academics, SMEs and industries), presents at regional roadshows and hosts an annual event on SC-5 with invited national and international speakers.

Water Joint Project Initiative (JPI): Ireland, represented by the EPA, is co-chairing the Water JPI programme which involves 20 EU research funders. The latest Water JPI co-funded call for research proposals on "Research and Innovation for Developing Technological Solutions and Services for Water Systems" closed in May 2015. A total of 118 proposals were submitted including 21 participants from Ireland. One project, involving Dundalk IT and Marine Institute, successful.

In 2016 the EPA will co-fund with DAFM and our European Partners in the area of sustainable water use in agriculture.



Climate Joint Project Initiative (JPI): Ireland, represented by the EPA, is also an active member of the Climate JPI and is part of a successful consortium that aims to advance a major European Research Area network (ERA net) project on climate services with a budget of €75million. We have also been actively involved in the development of the climate services call. Ireland also hosts a JPI Climate initiative on independent verification of GHG emissions and removals.

RADON RESEARCH

Research to gain insight into the levels of radon in homes and the factors that influence them is essential to providing up to date and sound advice to householders. The National Radon Control Strategy (NRCS) identified certain knowledge gaps that are being addressed through research over the course of the strategy.

In 2015 results of a study to update the national average level of radon in homes in Ireland revealed that levels have declined by 13% over the years since the last assessment in 2002. The

reason for this decline is thought to be the impact of changes to the building regulations which took effect in 1998 which require homes in high radon areas to be fitted with radon barriers.

Remediation of homes with high radon is the only way that the health risks posed by radon in homes can be addressed. A study completed in 2015 found that only 22% of homes identified as having radon levels above the reference level of 200 Bq/m³ are subsequently remediated. Typical remediation costs were also evaluated and an increase in costs was observed compared to the last survey in 2012.

During 2015, research to assess the impact of energy retrofitting in homes was carried out by the EPA, the Department of Environment, Community and Local Government and ten Local Authorities. The results of this work highlighted the importance of re-testing for radon following retrofitting work on buildings.

2.3

REPORTING

Independent reporting on environmental quality helps to inform decision making by national and local government.

NATIONAL EMISSION INVENTORIES

Ireland's provisional greenhouse gas inventory for the period 1990-2014 was published in December. The provisional 2014 data showed signs of an upturn in emissions in tandem with renewed economic growth. The upturn was somewhat masked because of reduced residential heating demand due to a warmer winter.

Emissions Projections

Greenhouse gas emission projections to 2030 were published in May. While the figures show that Ireland could potentially meet its EU 2020 targets under a "best case" scenario, they highlighted that Ireland is not on track towards decarbonising the economy in the long term.

Subsequent preparatory work on the 2016 emission projections towards the end of the year took into account a new agriculture strategy and upwards transport emissions trends. The indications from this work (to be published in 2016) were that Ireland would be unlikely to meet the 2020 targets under any modelled scenario.

AIR QUALITY AND NATIONAL EMISSIONS CEILINGS DIRECTIVE REPORTING

- ▲ The air pollutant inventory (NO_x, SO₂, NMVOCs and NH₃) for 1990-2014 due to be submitted to the EU Commission under National Emissions Ceiling Directive (NECD) in December 2015 was delayed until January 2016.
- ▲ The extended air pollutant inventory (NO_x, SO₂, NMVOCs and NH₃ plus CO, PMs, Heavy Metals and POPs) for 1990-2013 was submitted to the United Nations Economic

Commission for Europe (UNECE) in February - as required under the Convention for Long-Range Transboundary Air Pollution (CLRTAP).

- ▲ Projections were submitted under CLRTAP to UNECE in May for NO_x, SO_x, NMVOC, NH₃, PM_{2.5} and BC.

Under the EU National Emission Ceilings Directive and international Gothenburg Protocol under the UNECE Long Range Transboundary Air Pollution (LRTAP) Convention, Ireland is required to limit emissions of four transboundary air pollutants by 2010 and each year thereafter. These four pollutants are responsible for long-range transboundary air pollution such as acidification, eutrophication and ground-level ozone pollution.

As reported in the previous annual report, Ireland participated in an adjustment process established for the Gothenburg Protocol of the LRTAP Convention, to provide an adjusted national emission for NO_x and NMVOCs. The justification and quantification of each adjustment application was provided in detail and was included in a January 2015 data submission. Acceptance of the proposed adjustments was still outstanding at the end of 2015.

AIR QUALITY

The EPA continues to lead EU member states in the development and successful use of the new reporting system, regarding the reciprocal exchange of information and reporting on ambient air quality. In 2015 we successfully began reporting up to date data in real-time to the European Environment Agency for the parameters ozone, nitrogen dioxide, particulate matter, sulphur dioxide and carbon monoxide.

BATHING WATER QUALITY

The results of the 2015 bathing season were assessed by the EPA and will be formally released in April 2016 along with the bathing water report for 2015.

Details of the 2015 water quality assessments are shown in Figure 10.

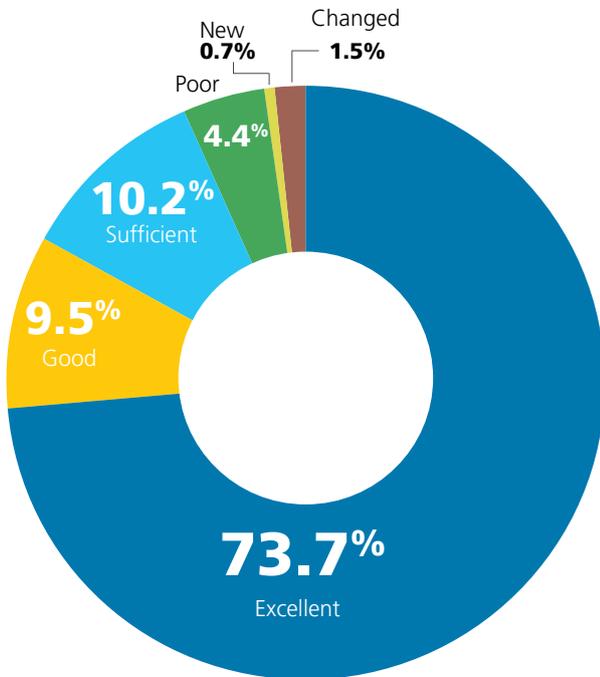


Figure 10: 2015 Bathing water quality

Throughout the bathing season results of the latest bathing water quality – provided by local authorities – are made available to the public on the EPA’s online bathing water system “Splash”. EPA bathing water administrative systems were updated to facilitate improved notification of potential incidents at bathing sites. Details of pollution incidents and remedial actions are also made available on Twitter [@EPABathingWater](https://twitter.com/EPABathingWater).

Management plans for the remediation of waters classified in 2014 as “Poor” were reviewed and discussions held with the relevant local authorities regarding their implementation.

Work on the development of guidance to the general public on the identification of new bathing waters, and for local authorities on assessing such submissions commenced. This is expected to be launched prior to the 2016 bathing season.

The EPA successfully delivered all required information and bathing water assessments to the European Environment Agency as required.

STATE OF ENVIRONMENT REPORTING

The EPA contributed to the preparation of the European Environment Agency State of Environment Report 2015, participating in workshops and providing data and feedback on various sections of the report.

Throughout 2015, the EPA Environmental Indicators web resource *Ireland’s Environment* continued to be regularly updated to provide the public and decision-makers with information on key environmental indicators. Information is made available in a variety of formats including videos, dashboards, downloadable data, graphs, infographics, factsheets and environmental assessments.

NATIONAL WASTE REPORTING

No reports were published in 2015 as the EPA prepared for a shift to bulletin style sectoral reports commencing in 2016.

- ▲ “Waste Classification: List of Waste and Determining if Waste is Hazardous or Non-Hazardous” was published in response to the change in EU legislation which came into effect from 1st June 2015.
- ▲ Data tables for national packaging, WEEE and ELV reporting for the calendar year 2013 were submitted to Eurostat. All targets for recovery/recycling were met. The recovery rates of construction & demolition (C&D) waste for the calendar year 2012 were also submitted to Eurostat.
- ▲ Contributions were made to an EEA Country paper on “Municipal Waste Management in Ireland” and on the Commission’s Compliance Promotion Initiative paper on hazardous waste management in Ireland.
- ▲ The EPA collaborated with the CSO to agree on the approach for reporting 2014 data under the Waste Statistics Regulation.

EUROPEAN POLLUTANT RELEASE AND TRANSFER REGISTER (E-PRTR)

- ▲ The E-PRTR for Ireland for 2013 was published in June 2015.
- ▲ The 2013 E-PRTR data associated with 369 facilities was submitted to the European Commission in March 2015.
- ▲ The PRTR unit, as part of an EU expert group, contributed to discussion around emissions from intensive agriculture facilities.
- ▲ Feedback was submitted to the Commission concerning a draft approach to integration of Large Combustion Plant reporting into the E-PRTR.



PERSISTENT ORGANIC POLLUTANTS (POPS) REPORTING

The EPA regularly reports to the Commission on what Persistent Organic Pollutants are being placed on the market and phase out of POPs by Irish companies where they are no longer being placed on the market (imported) for use.

National PCB (polychlorinated biphenyl) Inventory registered volumes decreased from 21,654 litres to 13,800 litres in 2015. The bulk of the decrease was accounted for by the removal from the inventory of eight transformers on one site, with a total volume of 6,624 litres. Compared to peak inventory volumes of approximately 255,639 litres (March 2010), this represents an approximate decrease of 95% in volumes.

NATIONAL DOSE REGISTER

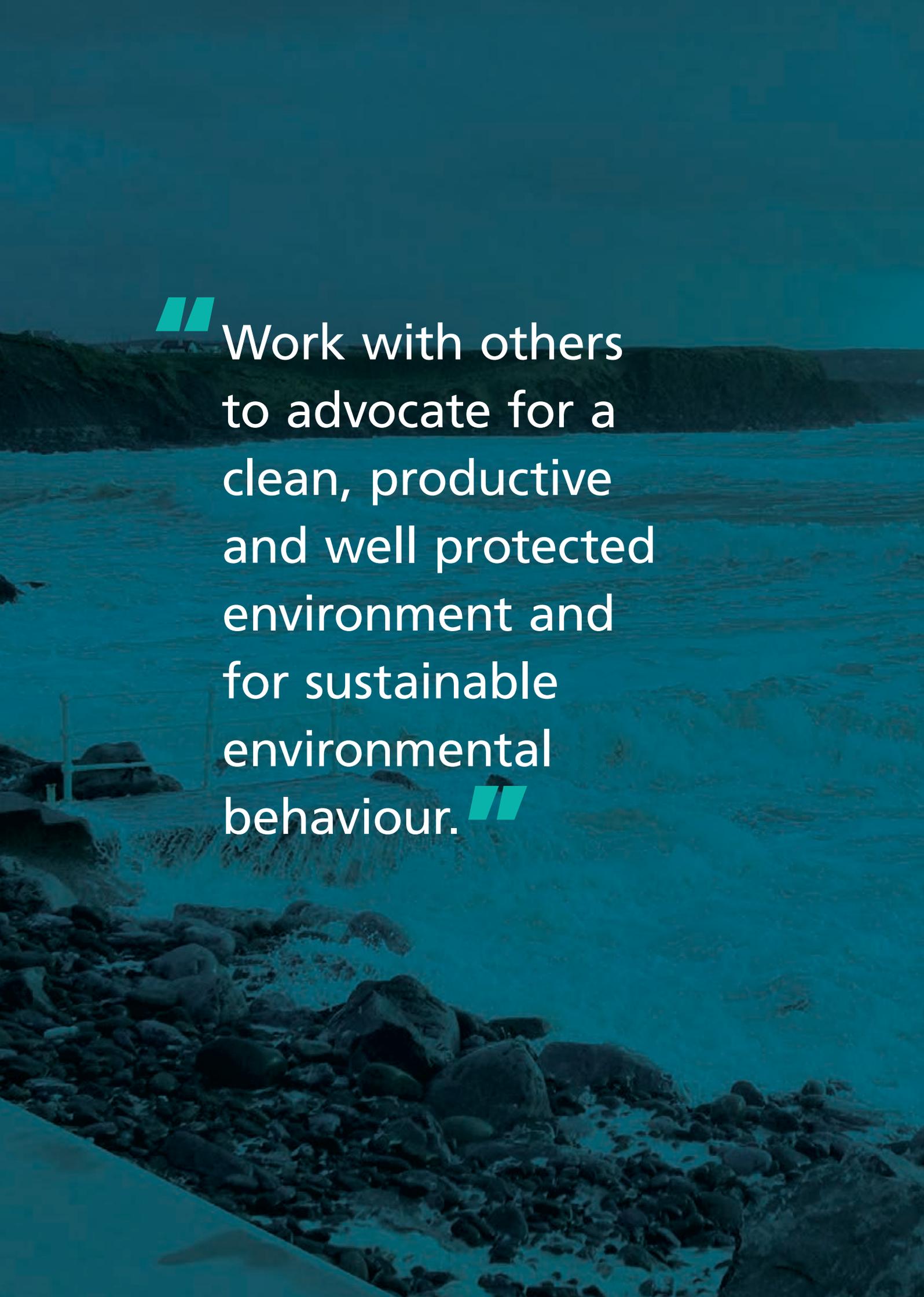
Each year Approved Dosimetry Services supplying dosimeters to people working with radiation in Ireland must submit all radiation dose measurements to the National Dose Register (NDR) which is maintained by the EPA. In 2015, data on the radiation doses incurred by approximately 8,000 workers in Ireland during the previous year was submitted to the NDR. Fewer than 5% of workers received doses in excess of the minimum reporting level of 0.1 mSv. The highest individual dose for a single month was 4 mSv and this was received by an industrial radiographer. For some cardiologists, cumulative doses over the 12 month period were close to or exceeded the dose level for classification as Category A radiation workers (6 mSv per year).

INTEGRATED REGULATORY REVIEW SERVICE MISSION

There are binding legal requirements in both the Euratom Nuclear Safety and Radioactive Waste Directives that the national regulatory framework for radiation safety, including the regulatory body, is subject to periodic international peer review. In fulfilment of this requirement, a review team of 14 senior international experts carried out a ten day mission to assess the regulatory framework for nuclear and radiation safety in Ireland, including where the use of radiation is regulated by the EPA. The main conclusion was that Ireland benefits from an effective and independent radiation safety regulatory body in the EPA. The review team also made several recommendations to further strengthen Ireland's regulatory safety framework. The full report of the review team is available on the EPA website at <http://www.epa.ie/pubs/conferencesandevents/irrsmissionreportfinal.html>.

THE JOINT CONVENTION ON THE SAFETY OF SPENT FUEL MANAGEMENT AND ON THE SAFETY OF RADIOACTIVE WASTE MANAGEMENT (THE JOINT CONVENTION)

Ireland is a Contracting Party to the 'Joint Convention' which aims to ensure a high level of safety worldwide in spent fuel and radioactive waste management and that there are effective defences against potential hazards including the prevention of accidents with radiological consequences. The fifth review meeting of the IAEA's Joint Convention took place from 11 to 21 May 2015. EPA presented Ireland's national report to the meeting for peer review. The success of Ireland's source reduction programme was widely commended by all participating countries. Ireland was adjudged to have demonstrated a good practice in this area by establishing an inter-agency working group to mobilise state resources to drive the disused source reduction programme with the number of disused radioactive sources, with half-lives longer than 10 years, being reduced from 5,000 to just 32.



“ Work with others to advocate for a clean, productive and well protected environment and for sustainable environmental behaviour. ”

3

ADVOCACY

3.1 Education

3.2 Awareness Raising

3.3 Behavioural
Change

3.4 Working with
Others

3.1

EDUCATION

The EPA continually strives to improve our communications and educational resources to better inform decision makers about the environment and to influence business, the public and the organisations that we work with.

EPA WEBSITE

The EPA's website is our main communication tool for disseminating information to the public, with over 1.5 million visits in 2015.

A large project on the website for 2015 was the development of a new *Ireland's Environment* web resource which was launched at the Environment Ireland conference in September. There were in excess of 40,000 visitors to the resource in 2015 and it was shortlisted for an eGovernment award in December 2015.

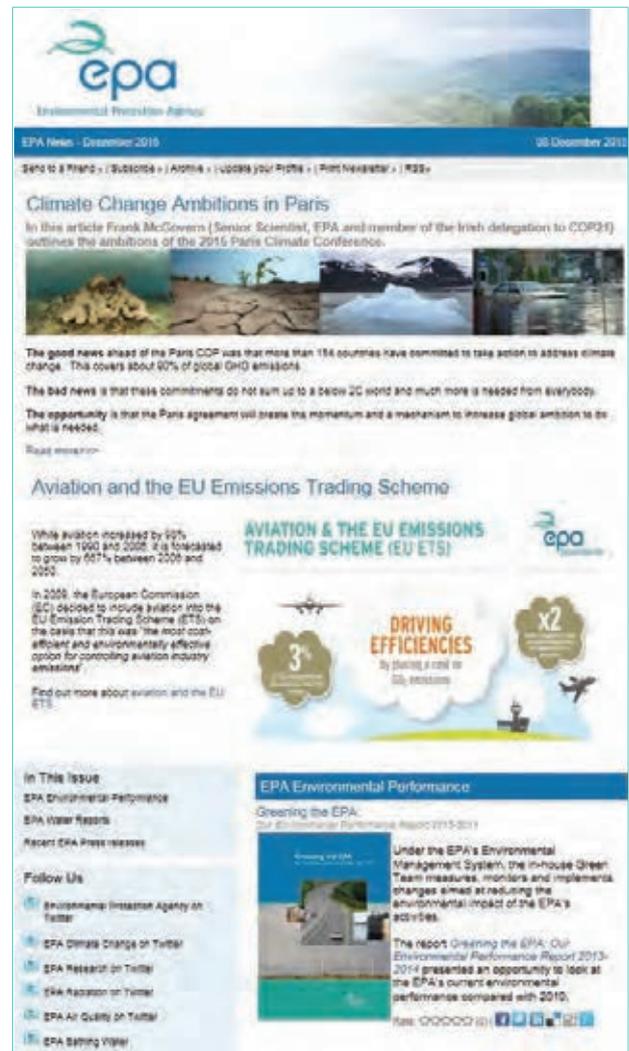


The EPA will continue to implement a programme of on-going development and improvement of the website to ensure that timely and accessible information is made available to all our stakeholders.

COMMUNICATING OUR KEY MESSAGES

The EPA Media Relations Office provides a 24 hour service to the media. In 2015 the Office handled 563 media queries and issued 37 press releases, which resulted in over 9,000 newspaper articles in which the EPA was mentioned.

The Director General's end of year statement was published, capturing the highlights of the EPA's main activities and achievements in 2014. Four editions of *EPANews*, the corporate electronic newsletter, were disseminated to over 5,000 subscribers during the year.



The EPA continued to use social media as a way to communicate its messages. By the end of the year the EPA had over 13,200 followers on Twitter, across seven accounts catering for specific interests including climate news, research news, air quality, bathing water information, radon news and water resources.

At the end of 2015 the EPA had 247 videos on YouTube, and these videos had received 221,019 views. Videos added in 2015 included topics such as greenhouse gas emissions; climate change and reducing food waste.

The EPA sponsored a lesson on septic tanks and how they work in *Science and Technology in Action*, a multimedia resource for second level schools.

In 2015 the EPA continued to promote its education materials and other online resources via targeted placements of articles in environmental and educational magazines.

The EPA again provided support funding for the thirteenth series of the *Eco Eye* TV programme, which was broadcast on RTE1 early in the year. Viewing figures averaged almost 500,000 viewers per programme. The EPA agreed to support a further series and pre-production was largely completed in 2015. This series continues to raise environmental awareness and provide the public with comprehensive information about environmental issues.



ENVIRONMENTAL QUERIES

The Environmental Queries Officer continues to provide a coordinated approach to the provision of specific environmental information on queries received from the public via telephone, email and internet. In 2015 approximately 2,500 queries were processed by the Environmental Queries Officer, providing stakeholders with a high level of service in accordance with the EPA Customer Charter. Areas of particular interest to the public included issues relating to domestic waste water treatment systems, remediation of septic tanks and the National Inspection Plan in addition to enquiries regarding illegal dumping, drinking water quality (private wells & public water supplies), noise pollution, asbestos and local authority issues.

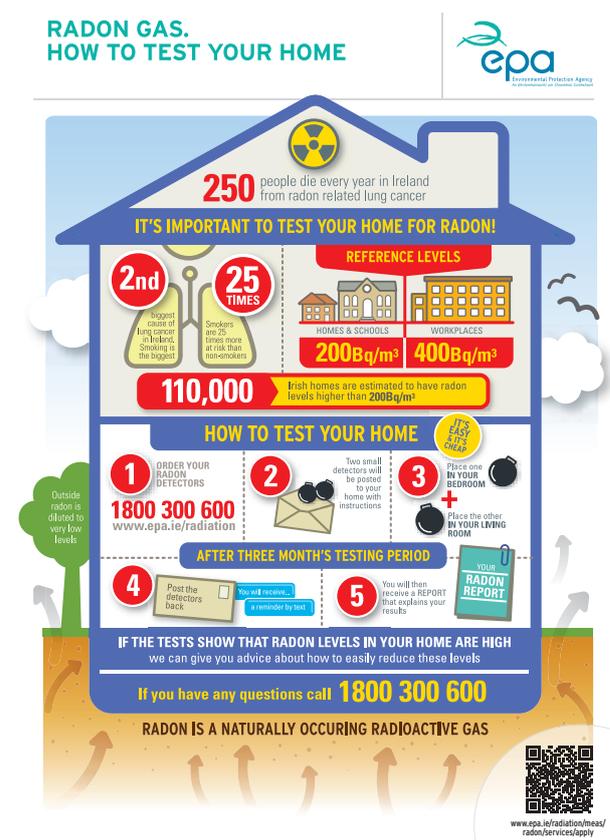
INFOGRAPHICS AND FACTSHEETS

A series of factsheets and infographics providing summary information and assessment on a range of environmental topics was added to during 2015. Graphic visual representations were used to summarise the main information on topics such as

- ▲ air quality,
- ▲ bathing water and
- ▲ waste.

These have been used to disseminate scientific information in an easy to understand format.

An infographic providing summary information on the health risks posed by radon gas in Irish homes, how to test homes for radon, and how to fix homes if found to have high levels was produced to coincide with the EPA regional awareness campaign in Co Clare. This infographic provided colourful and eye-catching posters which were distributed in public places in Ennis during the awareness campaign. In addition the key messages were disseminated via the EPA Twitter accounts.



In addition, key messages from these products were disseminated via the EPA twitter accounts throughout 2015.

In 2015 the EPA ran its six day Catchment Science course three times, continuing to build capacity and knowledge across the public sector, and to help with training new Water Community Officers hired under the Local Authority Water and Communities Office.



The EPA stand at the BT Young Scientist & Technology Exhibition 2015

CONFERENCES AND EXHIBITIONS

EPA staff engaged with stakeholders at a range of national and local events during 2015, including the BT Young Scientist & Technology Exhibition (where the EPA also presented a Special Environmental Award); the Native Species Weekend in Dublin Zoo and the National Ploughing Championships. These events provide an ideal opportunity to engage with our stakeholders and to help raise awareness of the environment and what people can do to improve it. Materials and support were also provided to 45 other events throughout the year.

The 11th *Environment Ireland* conference took place in September. This is Ireland's major annual conference on environmental policy and management and is organised in association with the EPA and the Department of Environment, Community and Local Government. Key themes for the 2015 event included environmental policy; community engagement; climate change; water management; waste and resource efficiency and natural capital.

Some other key conferences and events held during the year included:

- ▲ **The National Water Event 2015:** "Protecting Water from source to sea". This event is a key forum for local authorities, other public bodies, members of non-governmental bodies, and water professionals to learn about current changes in Ireland's water policy and practices. In 2015, The Minister for the Environment spoke at the conference setting out his vision for the water framework directive and launched a new local authority

office to address water framework directive obligations of local authorities with a specific focus on community engagement.

- ▲ **Climate Change public lecture:** Professor Myles Allen presented the 2015 EPA Climate Change Lecture, *Loading the Dice – The Role of Climate Change in Storms and Floods in the Mansion House* in March. The focus of his talk was on weather and climate extremes and possible changes to these extremes. The lecture attracted an audience of over 300 and was webcast live.

Recordings of the lecture series are now available on the EPA website at www.epa-pictorial.com and the EPA YouTube channel at youtube.com/user/epaireland.

- ▲ **National Radon Forum:** The 2015 National Radon Forum brought together an international audience with an interest in radon control and a role to play in reducing the risk from radon in Ireland. The Forum agenda included a detailed update on the important achievements under the Government's National Radon Control Strategy for Ireland, as well as presenting new research on radon levels in Irish homes and the factors that influence them.

Providing timely and easily accessible information to all our stakeholders contributes to public participation in environmental decision-making and gives people the information they need to make environmentally friendly choices.

3.2

AWARENESS RAISING



Pictured at the launch of the *See It? Say It!* app are Mr. Alan Kelly, T.D. (Minister for the Environment, Community and Local Government) Laura Burke (Director General, EPA) and Cormac MacGearailt (EPA).

SEE IT? SAY IT APP

An android version of the popular *See It? Say It!* app was launched in May (following the launch of the iPhone version in 2013). The app makes it easy for people to report environmental pollution and helps them to actively protect their local environment. The additional link to FixYourStreet.ie, which local authorities are already successfully using, has resulted in further efficiencies within the system.

OPEN DATA INITIATIVE

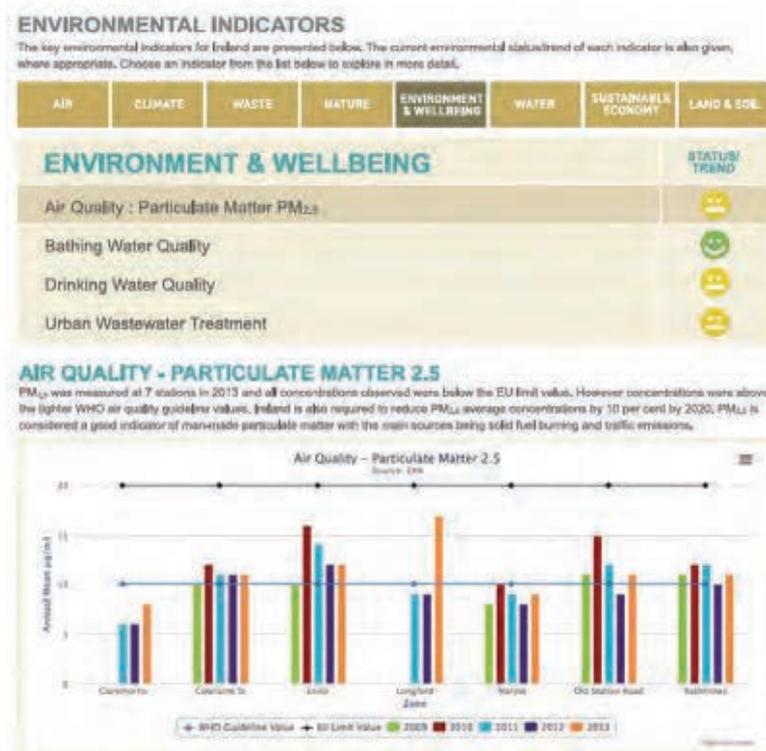
The Department of Public Expenditure and Reform launched an Open Data portal in July 2015. The EPA published 109 environmental datasets to this portal under an open licence to allow the data to be found, reused and redistributed.

IRELAND'S ENVIRONMENT

The EPA's redesigned *Ireland's Environment* web resource was launched at the Environment Ireland conference in September.

The resource allows easier public access to environmental data that has been gathered by the EPA and external bodies. Information is presented in a highly visual format under eight environmental themes: air, climate, water, waste, nature, land & soil, environment & wellbeing and sustainable economy.

It provides the public and decision makers with regularly updated information on key environmental indicators. Information is available in a variety of formats including videos, dashboards, graphs, infographics, factsheets and other useful sources of environmental information.



There were in excess of 40,000 visitors to the resource in 2015. *Ireland's Environment* was shortlisted for an eGovernment award in December 2015. The resource subsequently won the General Award in 2016.

CLIMATE SCIENCE COMMUNICATIONS

The EPA published a series of opinion pieces on climate change in the national newspapers throughout 2015. There was also significant media coverage of statements and comments by the EPA on the issue of climate change including editorial commentary.

RADON AWARENESS

Radon awareness focused on County Clare in 2015 with a radon awareness campaign centred on Ennis being held in November. Strong local support from Clare County Council, and in particular from the local Environmental Awareness Officer, made this a successful campaign with good public engagement. Elements of this campaign included:

- ▲ Two public meetings in Ennis;
- ▲ Briefing of TDs and Senators;
- ▲ Online and social media advertising and
- ▲ Advertisements in local papers and on local radio stations.

While there is a relatively high level of public awareness of radon, this does not translate into individual action on radon. The National Radon Control Strategy has identified this gap as a priority area of action.

3.3

BEHAVIOURAL CHANGE

We strive to influence positive behavioural change by supporting businesses, communities and householders to be more resource efficient.

NATIONAL WASTE PREVENTION PROGRAMME

The National Waste Prevention Programme promotes a resource efficient Ireland by tackling inefficient consumption and production. The programme has three main strands:

- ▲ Supporting resource efficiency and waste prevention by providing expertise and financial backing for projects/initiatives;
- ▲ Measuring progress through waste reporting and statistics; and
- ▲ Implementing statutory obligations in relation to hazardous waste management.

BEGREEN

BeGreen is the over-arching brand that encompasses all of the projects and programmes carried out in support of the National Waste Prevention Programme. Increasingly, the Programme has sought to develop its scope, firstly by covering new resource streams such as water and energy and also by recognising and reporting the economic and social benefits delivered.

Since 2011, the BeGreen Programmes (including Green Business, Green Hospitality, SMILE Resource Exchange, FreeTrade Ireland and Green Healthcare) identified economic savings in excess of €7 million, with further potential savings of €8million.

The EPA has always tried to make its functions accessible to the public through a variety of means. One of the most effective is the ongoing sponsorship of the *Eco Eye* series on RTE television. In 2015 *Eco Eye* featured an episode entitled "The Story of Stuff" which showcased a number of Green Enterprise projects including The Revival Roadshow (CRNI), Ecotourism on Inishboffin (Ecotourism Ireland), The Bia Food Initiative and Foodcloud, as well as projects that work with EPA initiatives like Eco-Mattress and Eco-cell. This episode is available on the *Eco Eye* YouTube channel.

Greenbusiness.ie

During 2015, the EPA's Greenbusiness.ie Programme continued to help Irish businesses improve their environmental performance and their bottom line, by identifying measures that could increase efficiency. 29 companies were visited, saving an average of €41,500 per company, with half of the visits taking place in support of Bord Bia's Origin Green Programme.

The new Green Business Case Study Booklet entitled "Green Business – How Much Can You Save?" was produced in 2015. This features 13 short and practical case studies grouped by savings through controlling use of Waste, Water and Energy.

In addition, a new Corporate Social Responsibility initiative called "Green 50" was launched which encourages companies making savings to donate to a partner charity.

Green Hospitality Programme

The programme which was funded by the EPA from 2008 to 2015 currently has 179 hospitality businesses as members. 105 of these members are hotels. 69% of these members have achieved Environmental Certification through the Green Hospitality Programme (GHP). During the last reporting year, benchmark figures suggested Irish hotel members are sending 81% less waste to landfill, using 34% less energy and 40% less water than they were in 2004.

Green Healthcare

In 2015, 10 hospital awareness day events were conducted addressing the following areas:

- ▲ Water
- ▲ Awareness Raising
- ▲ Nursing Homes
- ▲ Waste Benchmarking
- ▲ Continued support for existing facilities

SMILE Resource exchange

This programme helps companies exchange resources for the benefit of both parties, and is Ireland's major industrial symbiosis project. The core work of SMILE is to develop synergies between businesses and in 2015 SMILE directly supported 359 new synergies.

A total of 85 successful synergies were recorded in 2015, equating to an estimated 5052.4 tonnes of material actually diverted from landfill, diverted to recovery or recycling or diverted from recycling/recovery to reuse or remanufacturing. The 85 synergies combined represent actual costs saving for businesses of €1,229,201. In 2015 the project grew to a membership of 1,319 including Cork (471); Limerick, Clare, Kerry (335); Dublin (281); National (203) and Other (29).

SMILE are also a founding partner in an Interreg funded Project called "Circular Ocean". In pursuit of innovative and sustainable solutions for discarded fishing nets, the Circular Ocean project seeks to inspire enterprises and entrepreneurs to realise the hidden opportunities of marine waste in the Northern Periphery & Arctic (NPA) region. This project began in October 2015 and will run for 3 years until September 2018.

Freetrade Ireland

In 2015, FreeTrade Ireland diverted 12,351 items, amounting to more than 161 tonnes of high quality materials away from landfill to users of the service. The use of the service resulted in CO₂ savings of approximately 1,449 tonnes and significant financial savings for users of the service.

In 2015, the significant milestone of the reuse of 100,000 items through the FreeTrade service was reached, resulting in carbon savings in excess of 10,000 tonnes since the inception of FreeTrade.

Green Enterprise

Green Enterprise is a research project fund aimed at developing circular economy projects in the areas of clean production, social enterprise and eco-design. Running in its current form since 2012, it has funded 54 projects of a value of €2.5 million.

In our recent call, a total of 28 qualifying applications were received, resulting in 9 projects being funded plus three projects from a previous Reserve List.

Projects currently underway include:

Company	Project
Irish Green Buildings Council	Delivering a Residential Sustainability rating system to Market
Consulteco	Green Teams Recognition Scheme
The Upcycle Movement	The Upcycle Challenge
Food Cloud	Identifying & addressing challenges for the charity sector in maximising the potential of surplus food donations
Central Solutions	EPA Lean Water Community of Practice Phase 2
SpEco	Mattress Research
Ox Business Systems	Simplifying Sustainability Process Management for Smart Green Food Producers
Re-Create	Heads-Up
Wexford County Enterprise Board / Econcertive	GreenSave Wexford 2016
Oliver Carty Meats	Greening the Supply Chain
Midlands Simon Community	Creating Green Jobs in the Simon Community
Wheely Environmental Refuse Service (Wers)	Development of a Sustainable rHDPE Automotive Grade Recyclate

Special Initiatives

The NWPP will often fund special projects that address a particular area of interest, sector or identified need. For example, in 2015:

- ▲ Charity foundation, "The Wheel", were engaged to produce guidance on how to access funding aimed at charities and not-for-profits, identifying what funding sources might be available to them, and how to make applications for funding.

LOCAL AUTHORITY PREVENTION NETWORK

Coordinated by the EPA, the Local Authority Prevention Network (LAPN) is a collaborative network of local authority personnel undertaking waste prevention and resource efficiency activities with communities, businesses and other organisations across the country. The EPA provides financial assistance, training, technical assistance and networking opportunities to each of the 31 local authorities. In 2015, the total amount of grant aid provided to local authorities was €217,000 to fund a range of activities, including:

- ▲ Greening of Festivals and Events
- ▲ Stop Food Waste Prevention
- ▲ Promotion of reusable water bottles
- ▲ Other Reuse – Surplus Food donation, textiles and paints
- ▲ Community interaction

STOP FOOD WASTE

The EPA's Stop Food Waste programme promotes changes in behaviour that lead to reducing food waste, working in partnership with local authorities and communities. In 2015 Stop Food Waste engaged directly with over 15 local authorities through on-site assistance at events, festivals, talks and local training programmes. It is estimated that over 10,000 people directly interacted with these activities.

Using the successful community-based model, a further 11 Stop Food Waste challenges were run in 2015, with average food waste reductions of 35–45% realised.



Senator Lorraine Higgins and Lynn Haughton (Community Reuse Network) pictured with "Textile Ted" and the Resource Revival converted ambulance, at the launch of the Resource Revival Roadshow

COMMUNITY REUSE NETWORK

Community Reuse Network Ireland (CRNI) is an all-Ireland umbrella body that represents community-based organisations involved in reuse. In 2015 CRNI delivered over 60 workshops attended by almost 800 people with the *Revival Roadshow*, utilising an old ambulance and attending almost 60 events throughout the country promoting reuse and giving workshops.

HAZARDOUS WASTE PREVENTION AND MANAGEMENT

Implementation of the revised National Hazardous Waste Management Plan (2014–2020) continued throughout 2015. A key objective of the Plan is to prevent and reduce the generation of hazardous waste by industry and society generally.

Farm Hazardous Waste Bring Centres



The EPA continued their collaboration with Teagasc, the Department of Agriculture, Food and the Marine (DAFM), the Department of Environment, Community and Local Government (DECLG), local authorities, WEEE Ireland, European Recycling Platform (ERP) and an appointed hazardous waste contractor to facilitate the collection, recovery and disposal of hazardous waste from farms at ten bring centres during 2015.

Since 2013, almost 5,000 farmers used the 26 hazardous waste collection centres located across the country and the average weight of hazardous wastes, including pesticides and veterinary healthcare wastes collected per farmer was 90 kg.

The farm hazardous waste campaign has facilitated the removal of 440 tonnes of hazardous wastes (including 1.2 tonnes of persistent organic pollutants (POPs)) and 160 tonnes of waste electrical and electronic equipment and batteries. These farm hazardous waste collections probably represent the largest ever voluntary removal of highly toxic pollutants out of the Irish environment in such a short period of time, i.e. 13 weeks over 3 years.

NATIONAL RADON CONTROL STRATEGY 2014–2018

Radon gas is linked with 250 lung cancer cases in Ireland each year. Through the work of the EPA public awareness of radon is relatively high but the rate of testing of individual homes for radon remains quite low. This gap was identified under the National Radon Control Strategy and prioritised for action. In 2015 a review of the EPA radon awareness work was commissioned, to appraise the programme and its achievements from the perspective of health psychology. This study found that the work undertaken by the EPA was in line with best practice and in line with international radon programmes. However, as with other health advice

initiatives, the provision of quality and trustworthy information is not sufficient to motivate individuals to action. The research recommends a targeted approach which addresses obstacles to action, segments the message for different audiences, and normalises radon in society.

INTERNATIONAL COLLABORATION ON BEHAVIOURAL CHANGE AND RADON GAS

The EPA works closely with international partners to share experience and to develop best practice. In March 2015 in Estonia the EPA delivered training to staff from agencies and authorities from around the world at an International Atomic Energy Agency sponsored training programme. In this way EPA shared its experience and expertise on radon and the challenges of communicating with stakeholders on radon.

In May, the EPA hosted an educational visit by officials from the Environmental Protection Agency of Montenegro who came to learn about the radon programme in Ireland and to share their experiences with EPA staff.

In October the EPA was invited by the Swedish Radiation Safety Authority to present on its experience on developing a National Radon Control Strategy at a public forum in Stockholm.



3.4

WORKING WITH OTHERS

In order to deliver on our environmental obligations and strategic objectives we will continue to work with and through others to effect positive outcomes for the environment.

INTERGOVERNMENTAL ACTIVITY

Climate Change

The EPA represented Ireland at key meetings of the Intergovernmental Panel on Climate Change in 2015, including the October 2015 meeting to elect the new IPCC Chair, and other key positions for the 6th Assessment Cycle which will see the production of the next major Assessment Report and a number of Special Reports. Ireland has – along with Tanzania, New Zealand and Costa Rica – proposed that one of these special reports be on Food and Agriculture. In order to facilitate this, the EPA hosted an IPCC workshop on this topic in May 2015 which was attended by leading scientists from around the world.

The EPA continued to support the Department of the Environment, Community & Local Government work on international climate change including representing Ireland at Expert Meetings under the Latvian and Luxembourg Presidencies. The EPA provided scientific support at national and EU levels during meetings of the UN Framework Convention on Climate Change, including at the COP21 meeting in Paris which produced the breakthrough Paris Agreement on future actions to address climate change. EPA roles included leading and advising on negotiations and working closely with experts from other member states and the Commission.

The EPA also supported various government departments for national engagement with EU Climate Change Committee Working Groups including on land-use, land-use change and adaptation.

Radiological Protection

The EPA meets regularly with its counterparts in the UK to discuss radiological and nuclear issues. In 2015, these discussions centred around Sellafield, new nuclear build in the UK, the UK's plans for developing a Geological Disposal Facility for nuclear waste, nuclear environmental discharges, Irish radioactive waste strategy and nuclear emergency planning and international developments in the area. An information agreement for the exchange of information and cooperation in the area of nuclear safety regulation was agreed between the Office for Nuclear Regulation of Great Britain and the EPA.

EUROPEAN ENVIRONMENT AGENCY (EEA)

The EPA, in its role as National Focal Point for Ireland, continued to lead out on the co-ordination of environmental data and information exchange with the EEA. This data is used by the EEA in its assessments of the European environment. In the 2014/2015 reporting cycle Ireland achieved 100% compliance with the reporting requirements, one of nine countries to do so.

The EPA plays an active and supportive role in the work of the EEA and continued to maintain and develop the National Reference Centre Network and to facilitate and coordinate contacts, requests and deliveries between national and EU levels. The EPA also participated in some specific EEA projects covering citizen science, a review of the core data flows and sharing experiences on national level projects to deal with global issues. The EPA actively worked with the EEA in supporting the launch of the European State of Environment Report and facilitated a presentation by the EEA at the *Ireland's Environment* conference in September. This included preparing a national assessment and input to various environmental thematic assessments.

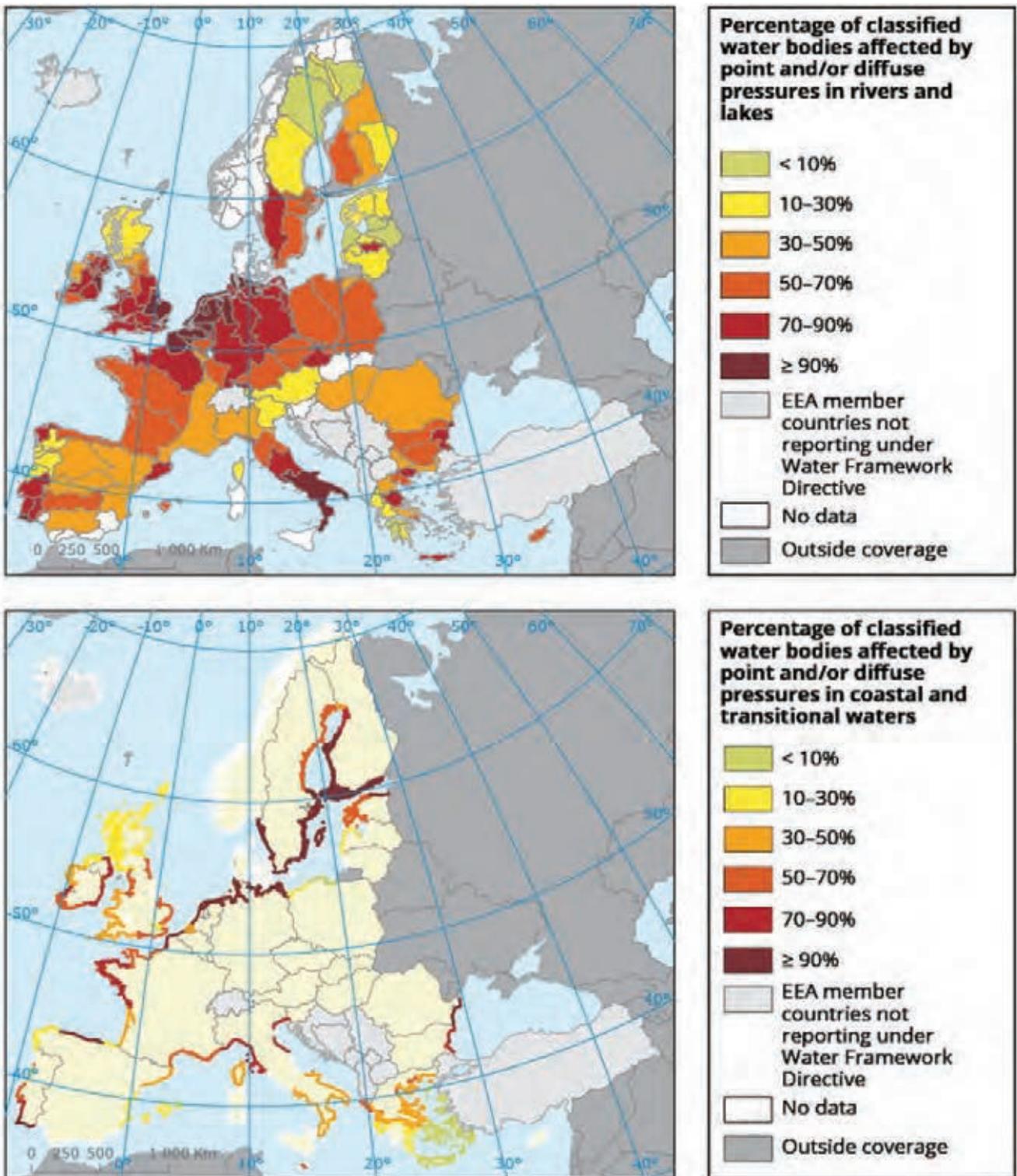


Figure 11: Percentage of classified rivers and lakes (top) and coastal and transitional waters (bottom) in Water Framework Directive river basin districts affected by pollution pressures

Note: Switzerland data sets are not compatible with the EU Water Framework Directive assessments and so are not included above. Switzerland has high levels of point and/or diffuse pollution pressures, particularly in lowland areas.

Source: EEA, 2012c.

NATIONAL ACTIVITIES

Environmental Indicators

The National Indicator Set was finalised in 2015 and published on the *Ireland's Environment* web resource. Data contributors include the Central Statistics Office, Sustainable Energy Authority of Ireland, Department of Agriculture Food & Marine, Birdwatch Ireland, the National Biodiversity Data Centre and the National Parks & Wildlife Service. The EPA worked closely with these organisations to facilitate the exchange of environmental data. On an international scale the EPA provided data to the OECD for use in its assessments and indicators.

Local Authority Enforcement

Ireland's environmental challenges need to be tackled in a structured and coordinated way, and better implementation of existing legislation is identified as one of the critical factors to achieve this objective. Work is now underway to further strengthen governance structures in local authorities for the implementation and enforcement of the Water Framework and Waste Framework Directives. By working together, local authorities will be in a better position to bring the full weight of the State's resources to bear on the most pressing environmental problems.

Local authorities are at the forefront of environmental law enforcement nationally. Staff in local authorities enforce over 500 environmental protection obligations arising from more than 100 pieces of legislation.

Local authorities enforce 3,700 licences and, in 2015, their staff conducted 110,000 inspections, handled 63,000 complaints, and undertook 7,000 enforcement actions and 500 prosecutions.

In 2015, the EPA began the process of the development of a framework to measure the environmental enforcement performance of local authorities. The aim is to provide local and national-level data to assist authorities to plan and implement a programme of continuous improvement.

Strategic Environmental Assessment

In its statutory role as an SEA environmental authority, the EPA continued to inform and influence key sector plans and programmes during 2015, and liaised with a range of Government Departments and state agencies in relation to the application of SEA for key significant national plans and programmes.

Key sectors in 2015 included Agriculture, Forestry, Energy, Water Management (Water Framework Directive/Flood Risk), Transport, Tourism and Land Use.

The SEA Team participated in an EU commissioned study on "the Application and Effectiveness of the SEA Directive (Directive 2001/42/EC) in Member States" in collaboration with the Department of Environment, Community and Local Government during 2015.

National Implementation Group for Water Framework Directive

The EPA established a new Group in 2015 to create working arrangements with other state and public bodies on the implementation of the Water Framework Directive. The purpose of the Group is to assist the Minister by ensuring all technical and scientific implementation aspects of the Directive are undertaken across the State in an efficient, consistent and effective manner. The Group will also facilitate regular exchange of information and knowledge between the various agencies involved about technical and scientific WFD implementation issues. It will be a forum for discussing and collaborating on technical and scientific issues and will provide an overarching coordination role for dealing with cross-cutting technical and scientific issues that may arise from time to time. The Group will also provide a mechanism for collaboration with Groups set up to progress the implementation of the Floods Directive and Marine Strategy Framework Directive and with the relevant competent authorities for those directives.

The National Technical Implementation Group will be chaired by the EPA. Membership of the Group consists of representatives from relevant Government Departments and Public Agencies, at a senior level:

- ▲ Department of the Environment, Community and Local Government;
- ▲ Environmental Protection Agency;
- ▲ Department of Agriculture, Food and the Marine;
- ▲ Teagasc;
- ▲ Marine Institute;
- ▲ Coillte;
- ▲ Geological Survey of Ireland (DCENR);
- ▲ Inland Fisheries of Ireland;
- ▲ County and City Management Association;
- ▲ National Parks and Wildlife Service;
- ▲ Waterways Ireland;
- ▲ Department of Health/Health Service Executive;
- ▲ Office of Public Works;
- ▲ Irish Water;
- ▲ An Bord Pleanála
- ▲ National Roads Authority;
- ▲ Commission for Energy Regulation;

- ▲ Northern Ireland Environment Agency/Department of the Environment, Northern Ireland;
- ▲ Any other organisation or body as the EPA may determine;
- ▲ Chairs of the Catchment Management Network Working Groups to participate as required for progress updates.

National Radon Control Strategy (NRCS)

2015 saw the completion of almost two years of the NRCS. The NRCS is a Government led strategy which aims to minimise the exposure to radon gas for people in Ireland and to reduce, to the greatest extent practicable, the incidence of radon related lung cancers. The Year One report gave evidence of the significant progress that had been made in establishing the groups and teams that would work together to deliver on the strategy and the progress made by those teams. During 2015 these groups collaborated to further advance more than half of the 30 actions specified in the NRCS. The NRCS will continue to progress until April 2018.

RADIATION PROTECTION ADVISERS

The Radiation Protection Advisers (RPAs) play an important role in ensuring radiation safety in Ireland. Each year all approved RPAs on the EPA's Category I (medical, dental and veterinary) and Category II (industrial) RPA registers are invited to attend an RPA Liaison Meeting. The aim of this meeting is to provide updates to the RPAs on recent regulatory changes and developments, new issues that may affect them in the coming year(s) and to provide them with an opportunity to raise any topical issues with the regulator. The fifth RPA meeting was held in December and was attended by 32 RPAs.

MEMORANDUM OF UNDERSTANDING (MOU) AGREEMENTS

During 2015, the EPA signed three new Memoranda of Understanding with Met Éireann, the Food Safety Authority of Ireland and the Health Service Executive.



The MOU with FSAI is signed by Dr Pamela Byrne (CEO, FSAI) and Laura Burke (DG, EPA)

The EPA has in place Memorandum of Understanding (MOU) Agreements with various organisations that have an involvement in, or who contribute to, matters relating to the environment. These MOUs are published on the EPA website.

National Consultations

In 2015 the EPA made a number of formal submissions on national policy development:

EPA SEA Scoping Submission on the Proposed National Bioenergy Plan

This is the EPA's SEA Scoping Submission on the Proposed National Bioenergy Plan

EPA Submission on Draft Food Wise 2025 Strategy – August 2015

Submission made by the EPA in August 2015 on the Draft Food Wise 2025 Strategy and associated SEA Environmental Report

EPA Initial Consultation Comments on FoodWise 2025 - January 2015

EPA initial consultation comments on FoodWise 2025 issued in January 2015

EPA Submission on Community Development

EPA Submission on Community Development

EPA Submission on Irish Water's Draft Water Services Strategic Plan

EPA Submission on Irish Water's Draft Water Services Strategic Plan

EPA Submission on the Draft Regional Waste Management Plans

This is the submission made by the Agency to the public consultation on the Draft Regional Waste Management Plans

National Committee Activities

During 2015, the EPA provided expert support and advice to a number of government departments including Environment, Agriculture, Energy, Defence, Finance, Health, Public Expenditure and Foreign Affairs on low carbon development, sectoral adaptation strategy development, issues of land use and land use change, health risks from radon gas, emergency planning, medical uses of ionising radiation and climate finance. The EPA continued to chair and facilitate the air quality health information working group. This group provides a forum for environmental and health governmental stakeholders, including the HSE, to discuss air quality related health topics.

During 2015, the EPA participated on the following committees and steering groups:

- ▲ National Radon Control Strategy Steering Group
- ▲ National Radiation Safety Committee
- ▲ National Research Prioritisation Exercise
- ▲ National Forum on Research Integrity
- ▲ Strategic Research Proposals Group

- ▲ National Energy Research Strategy group established by the Department of Communications, Energy & Natural Resources
- ▲ Offshore Renewable Energy Plan Steering Group & ORESG - Environment Working Group
- ▲ National Renewable Electricity Development Framework - Planning/ SEA Steering Group
- ▲ National Water Policy Advisory Committee
- ▲ Catchment Flood Risk Assessment and Management Studies CFRAMS
- ▲ Shannon Integrated Framework Plan Steering Group & Environment Working Group
- ▲ New Regional Waste Management Planning Steering Committee
- ▲ National Waste Prevention Committee
- ▲ Government Task Force on Emergency Planning
- ▲ National Laboratories Strategy Group
- ▲ National Enforcement Network Steering Committee
- ▲ National Peatlands Strategy Implementation Group
- ▲ Ireland's Offshore Oil and Gas Strategic Environmental Assessment (IOSEA5)
- ▲ National SEA (Environmental Authorities) Technical Forum
- ▲ National Technical Coordination Group & Individual CFRAMS Studies (x3)
- ▲ Irish Ramsar Wetlands Committee
- ▲ Irish Forum on Natural Capital
- ▲ 2025 Agri-Food Strategy Committee
- ▲ Food Wise 2025 Environmental Sustainability Committee
- ▲ Horizon 2020 High Level Group
- ▲ Sectoral Adaptation Plans Steering Committee
- ▲ RDP Monitoring Committee 2014-2020
- ▲ Dairy Forum
- ▲ Bio Energy Steering Group
- ▲ Wild Atlantic Way Environmental Monitoring Group
- ▲ NPWS Pilot National Ecosystem and Ecosystem Services Mapping Services Project Steering Group
- ▲ WFD Programme of Measures Group (Water Policy Advisory Committee)

As a member of the Government Taskforce on Emergency Planning, the EPA contributed to developments on national emergency planning including the development of a draft National Framework for Emergency Management.

Support of the National Emergency Plan for Nuclear Accidents (NEPNA)

In 2015, the EPA continued to support the Department of Environment, Community and Local Government in the review and update of Ireland's National Emergency Plan for Nuclear Accidents (NEPNA). The revised document contains chapters on roles and responsibilities, preparedness, response and recovery and – as well as addressing nuclear accidents abroad – it includes local radiological emergencies. The draft plan will be reviewed by the Government Task Force on Emergency Planning in 2016.

Stakeholder Engagement in Radiation Emergency Preparedness and Response

In 2015, the EPA presented results from Irish food and agriculture stakeholder discussions on issues surrounding the contamination of food following a nuclear accident to international audiences. This stakeholder panel was formed as part of an EU-funded project called PREPARE that is addressing issues in nuclear and radiological preparedness that were identified following the Fukushima nuclear accident in 2011.

The panel includes members from government departments and agencies as well as representatives from the farming, dairy, meat, crops, seafood, food retail and consumer sectors. One of the key points from these discussions was the importance of early and clear communications with the public and industry in the event of a nuclear emergency to build trust and support the implementation of protective actions.

The outputs from these discussions are being considered in the revision of the National Emergency Plan for Nuclear Accidents and stakeholders will be provided with an opportunity to review the plan before publication.

National Landcover & Habitats Mapping Working Group

There is currently a significant gap in the availability of detailed landcover and habitat mapping data. The EPA produces the CORINE Landcover and Landcover Change datasets for the EEA but the scale of the data is poor and provides little benefit for local and regional analysis. At a national level the EPA has been central in the National Landcover & Habitats Mapping Working Group, which aims at developing high resolution mapping data for the purposes of better environmental analysis. In 2015 a policy proposal to develop a national mapping programme was supported by the Department of Arts Heritage & Gaelteacht, and a work programme for 2016 was developed for delivery through a shared service by the partners on the working group. This work programme will develop standards and mechanisms for the delivery of national landcover and habitat maps over a 3–5 year period.

“ The EPA is committed to being a high performance organisation and to achieving best practice in its management, governance and use of technology ”

4

ENABLING CHANGE & REFORM

4.1 People &
Structures

4.2 Processes &
Technology

4.3 Governance



4.1

PEOPLE & STRUCTURES



HUMAN RESOURCES

The EPA's continuing goal is to ensure that we have a committed workforce that performs to maximum ability.

At the end of December 2015 the EPA staff complement was 369. One hundred and forty-five staff were located at EPA Headquarters in Wexford with the remaining staff strategically located in five Regional Inspectorates and two Offices throughout the country.

The EPA has continually implemented adaptive changes and has implemented more efficient ways of working as the most effective means of delivering on its statutory functions with reduced staffing and financial resources. The organisational structure has been changed to reflect staff resources and to reflect emerging priorities and challenges. In addition, a lateral mobility exercise was undertaken in 2015 to re-assign staff to priority work areas and to address staff shortages.

The EPA has a very positive attitude to work placements and continued to participate in the National Internship Scheme in 2015. Many of the JobBridge Interns who participated in the scheme were successful in gaining fulltime employment in the private sector as a result of their placement with the EPA. At the end of December 2015 a total of 2 JobBridge Interns were in place.

Implementation of the new integrated Human Resource Management Information System was ongoing during 2015. As a result of a system upgrade, the implementation of other pension and time and attendance modules will continue in 2016.

PARTNERSHIP

The EPA has had a Partnership Committee (Meitheal) in place since 1999. The work of Meitheal is mainly conducted through Cross Office groups. During 2015 Meitheal continued to play a role in the ongoing development of Green Team activities and staff consultation in relation to the development of the new EPA Strategy 2016–2020. A new Code of Practice and Meitheal booklet was also developed and agreed by the committee.

Workplace Wellbeing at the EPA

The EPA believes that a thriving workforce is at the heart of a high performance organisation. For this reason, the EPA has been pursuing an active programme to promote workplace wellbeing. Activities have included lunchtime seminars on wellbeing topics and a subsidised health screening. The Board agreed to provide a subsidised programme of Health Screening for EPA employees in 2015. Nearly 75% of the staff availed of this health initiative.

Actions have been carefully selected to provide tangible benefits and staff take-up levels are very good.

During 2015, the EPA worked on the development of a healthy workplace framework; and was one of the first public sector bodies to participate in National Workplace Wellbeing Day. The EPA will build on its leadership role in this area over the coming years to support staff to be motivated and capable for delivery on the EPA strategic goals.

SKILLS AND CAPABILITIES

The EPA offers an extensive range of supports to all staff that assist them to perform and develop in their current role, prepare for future roles and improve the depth of skills and knowledge across the organisation. This commitment is reflected in a budget allocation to Learning & Development which represents approximately 3.1% of payroll spend. During 2015 staff participated in over 318 learning events including training courses, workshops, conferences and seminars. Also included in these events are informal learning opportunities which the EPA sees as a significant forum for learning. This amounted to a total of 2,092 training days - an average of 5.6 days' training per person.

An annual Learning & Development Plan is aligned to support the achievement of EPA goals, whilst also supporting team and individual development needs.

STRONG LEADERSHIP

A number of initiatives are available to leaders in the EPA, including the continued roll-out of an Essential Skills of Management & Leadership programme. The programme was initially designed to provide management training to anyone moving from a position of non-people manager to people manager. It has since evolved to a wider audience, namely managers at all levels who wish to refresh and refocus their leadership capabilities.

The Programme incorporates and reflects the core values of the EPA, and also reflects and drives a focus on active learning. This equips managers in the EPA with the knowledge, skills and behaviours to effectively deliver their work programme and ultimately the EPA Strategy.

EPA ENVIRONMENTAL MANAGEMENT SYSTEM

The EPA is committed to reducing the environmental impacts of its own operations. The EPA's Environmental Management System (EMS) is audited twice a year by an external accredited body to ensure that the requirements of the internationally recognised ISO 14001 Standard are met.

SAFETY, HEALTH AND WELFARE AT WORK

The EPA is committed to ensuring the safety, health and welfare of its staff through the provision of appropriate training, audit, risk assessment and safety awareness programmes. The EPA's good safety record was maintained, with no serious accidents or injuries occurring at work during 2015.

OVERVIEW OF ENERGY USAGE IN 2015

The main energy consumption at EPA offices and laboratories is related to space heating, lighting, power, hot water and transport fuel. In 2015 the EPA's total energy consumption amounted to 3,405 MWh, which represents a 27% increase on the previous year. The increase in total energy consumption is due to the inclusion of the offices and laboratories of the former Radiological Protection Institute of Ireland which we are reporting on for the first time in 2015. The breakdown of our energy usage is shown in Figure 13.

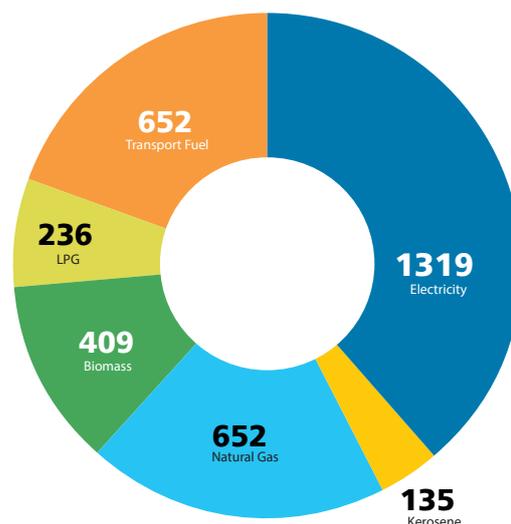


Figure 12: EPA energy usage, 2015 (MWh)

BOARD OF THE EPA

The EPA Board comprises six full-time Executive Directors. A total of 48 Board meetings were held in 2015; this included 13 general meetings, at which corporate policy, strategy, finance and planning issues were dealt with, and 35 technical meetings, at which licence applications, prosecutions and operational issues were dealt with.

ADVISORY COMMITTEE

The term of office of the sixth Advisory Committee commenced in February 2013 and will end in February 2016. During this time the Committee will have held 12 meetings, of which four were held in 2015. The Committee considered a wide range of issues during their three-year term, and their report to the Minister for Environment, Community and Local Government is available on the [EPA Website](#).

4.2

PROCESSES & TECHNOLOGY

INFORMATION TECHNOLOGY ENABLED CHANGE AND REFORM

In line with the 2015 Government ICT Strategy, Information Technology has always been used in the EPA as an enabler of change and reform by:

- ▲ simplifying, standardising and where possible, automating key processes and regulatory tasks;
- ▲ maximising the number of online and shared services, thereby providing a better customer service, improving data accessibility and reducing costs for the taxpayer and our service users;
- ▲ the adoption and development of leading edge information, communication and spatial assessment technologies to deliver effective outcomes and our strategic priorities;
- ▲ providing improved access to data and providing key decision support tools that allow stakeholders to carry out their tasks more efficiently.

During 2015 the EPA established a new Board Sub-Committee to oversee the governance and strategic direction of Information Technology enabled change. The EPA also engaged in a number of national and international cross public sector information exchange forums to facilitate the adoption of new business processes and to build synergies with other public bodies. Prior to implementing any change EPA processes are subject to business analysis review focused on a customer-centric approach to effective regulation, provision of high quality environmental information and delivering services from a citizen's point of view. The EPA continued to make significant improvements in its environmental and corporate business processes in 2015 as set out below.

EPA'S REGULATORY SYSTEM (LEMA)

The EPA's integrated regulatory system (LEMA) grew significantly in 2015. The system provides a consolidated view of licensing activities alongside compliance status and enforcement activities. Over 3,000 licensees have electronic

access via the EDEN portal and the system also serves the public via the EPA website for complaints and submissions. This integration improves communication and reduces the administrative burden for both licensees and EPA staff. Examples include:

- ▲ Processing 3,500 online transactions per annum for radiological protection licensees, serving over 1,000 customers.
- ▲ Providing online daily updated emission data to Irish Water, supporting their urban waste water operations.
- ▲ Publication of EPA industry and waste site visit reports alongside the licensees' response on epa.ie.
- ▲ EPA using more accurate up-to-date system data for the enforcement of priority sites.
- ▲ Live tracking and provision of key performance indicators for key enforcement records to EPA managers covering complaints, incidents, licensee returns, non-compliances and site visits.

The newest radiological protection element of the system for industrial and healthcare licensees was recognised by an International radioactivity review as an example of good practice. This element replaced a postal paper-based approach to processing the 3,500 transactions referred to above.



Figure 13: LEMA

EDEN

The Environmental Data Exchange Network (EDEN) is a shared service that is hosted by the EPA for public sector organisations. The EDEN Portal provides single sign on capability for 5,000 users from 2,000 organisations, across both the public and private sectors, to access shared environmental data and multiple environmental web applications. To improve the service delivery provided to stakeholders significant portal redesign work was completed in 2015. The redesign included a more streamlined and intuitive user interface and the introduction of the latest single sign on technology. Redesign work was in collaboration with public and private sector stakeholders.

Building on the integration between EDEN and LEMA, at the end of 2015, LEMA site visit functionality was extended to incorporate radiological inspection activities. This new functionality will come into effect for site visits carried out in 2016, which will allow licensees to view their scheduled visits, submit pre-visit documentation, view their site visit report online and update the EPA on responses to inspection findings through EDEN.

WATER FRAMEWORK DIRECTIVE (WFD)

A new application to support the implementation of the Water Framework Directive (WFD) was developed and released via EDEN. The WFD Application developed in 2015 is designed to support the WFD Characterisation process, which is the first step in the overall WFD planning cycle, and will provide the building blocks and outputs necessary to support River Basin Management Planning, Programmes of Measures and the design of the national Monitoring Programmes. Future phases of development will focus on the provision of public access to this information and extending the WFD Application to help define measures aimed at maintaining or achieving good water quality status for all national waters.

Further development of mobile applications for field surveys by river and lake biologists was progressed. This work delivers efficiencies in the collection of water quality data required for WFD implementation and enhances the management of, and access to, this data.

MAPS

There was significant work carried out on spatial data during 2015. This included updating the Register of Protected areas, the release of new river and ground water bodies datasets and the creation of new catchment and sub-catchment datasets for the purposes of managing the implementation of the Water Framework Directive. This data has been made available to all stakeholders including the public via the [EPA's GeoPortal](#).

LABORATORIES

The EPA implemented a new integrated laboratory information management system as part of an overall programme that integrated our laboratories' structure based on shared quality assurance/quality control. The new system will facilitate the integration of EPA's laboratory activities and provide key information into EPA's monitoring, assessment and statutory reporting systems.

INFORMATION SYSTEMS ENHANCEMENTS

There was significant work carried out providing enhancements to a number of existing environmental, analytical and corporate systems to add new features leading to increased efficiencies. These enhancements enabled efficiencies to internal Licensing and Enforcement processes; provided real time data for decision making; and also provided the general public and Local Authorities with additional access to information via online web portals.

CORPORATE SYSTEMS

As part of an on-going programme to integrate and streamline EPA internal corporate processes the EPA have implemented new systems for financial management, processing travel and expense claims, staff salary payment, and maintaining human resources records.

INFORMATION TECHNOLOGY INFRASTRUCTURE

The EPA's internal Information Technology Infrastructure was strengthened, making it more reliable and robust to support the ever changing demands of managing EPA's information and data assets. The improvements included enhancing our data recovery capabilities, system recovery capabilities, and data access capabilities for inspectors and staff in our regional offices.

4.3

GOVERNANCE

CORPORATE GOVERNANCE

The EPA complies with the requirements of the revised *Code of Practice for the Governance of State Bodies, 2009*. It has a Corporate Governance Unit in place with responsibility for overseeing and reporting on the implementation of and compliance with the Code of Practice. It is the policy of the EPA to support the progressive development and strengthening of an effective control environment, risk management systems and internal audit function.

INTERNAL AUDIT

An Internal Audit Committee (IAC) is in place to review the effectiveness of the EPA's systems of control. The IAC comprises an external Chairperson and other external expertise in lieu of non-executive Director input, together with a senior representative from the EPA.

During 2015, an external auditor was appointed and the audit programme was progressively implemented and outstanding work from previous years' audits continued, ensuring that the recommendations from previous audits were implemented. One audit was completed in 2015 in the area of Travel & Subsistence and Salaries & Allowances and one audit commenced on Management of Programmes funded by the Department of the Environment, Community and Local Government.

All public bodies in receipt of public funding must comply, as appropriate, with the relevant requirements of the Public Spending Code and taking this into consideration, the IAC agreed that the Value for Money reviews carried out by the EPA are best described as Efficiency and Effectiveness reviews. An Efficiency and Effectiveness review commenced in the area of Learning & Development during 2015.

RISK MANAGEMENT

As required of all State agencies, the EPA fully complies with the provisions of the Code of Practice for the Governance of State Bodies with a risk management framework in place which provides a cycle of risk management procedures as well as providing a framework for managing risks. A Chief Risk Officer and a Risk Committee are in place.

The Risk Committee met on three occasions in 2015. A review of risks was completed in 2015 and the Corporate Risk Register was updated to reflect changes that had occurred in relation to principal risks and mitigations. The Corporate Risk Register sets out key risks under the following nine categories:

- ▲ Reputation,
- ▲ Operational & Business Controls,
- ▲ Personnel,
- ▲ Legal and Regulatory,
- ▲ Information Management and Technology,
- ▲ Fraud and Corruption,
- ▲ Budgetary/Financial,
- ▲ Health & Safety, and
- ▲ Inter-Agency.

Through the risk management process, the principal risks facing the EPA were identified as:

- ▲ Maintaining the trust and confidence of local communities, key stakeholders and the general public in the EPA;
- ▲ The adequacy of staff resources in both the technical and corporate areas to carry out work, maintain high quality standards and deliver on our strategy;
- ▲ The adequacy of income, in particular earned income and the continued dependence on support from the Environment Fund;

- ▲ The potential closure/liquidation of large licensed facilities with associated environmental liability legacies and costs;
- ▲ Compliance with complex legal, regulatory & governance company/corporate obligations, and compliance with EPA Acts, RPII Acts and Regulations.

As set out above, the EPA has a robust procedure in place for identifying and actively mitigating risks.

STRATEGIC PLAN

During 2015 the EPA continued to implement the key priority actions identified in the *EPA Strategic Plan 2013–2015 – Working with Others for a Better Environment*. Progress on the implementation of these actions is outlined throughout this Annual Report under the key chapter headings of Regulation, Knowledge and Advocacy.

Substantial work was made throughout 2015 in developing a new EPA Strategic Plan 2016-2020 which will be launched in January 2016. The new Strategic Plan is titled, *Our Environment, Our Wellbeing*, highlighting the importance of a clean, protected environment for our health, our wellbeing and our quality of life.

The EPA has identified five strategic goals for this new strategic plan:

- ▲ Trusted Environmental Regulator,
- ▲ Leader in Environmental Evidence & Knowledge,
- ▲ Effective Advocate and Partner,
- ▲ Responding to Key Environmental Challenges and
- ▲ Organisationally Excellent.

As set out in the Plan, the EPA intends to further strengthen its core functions of regulation, enforcement and assessment, prioritising air and water quality, climate change, and enhancing the radiation protection framework. The EPA will also seek to engage more closely with citizens, communities, and businesses, to mobilise sustainable behaviours. The development of the Strategic Plan involved extensive consultation with many people and organisations, including the public.

ACCESS TO INFORMATION

The EPA is committed to being an open and accessible organisation. The Freedom of Information (FOI) Act and the Access to Information on the Environment (AIE) Regulations are two methods of accessing information for members of the public that have not been able to access the information they require under alternative routes.

During 2015 the EPA received 43 FOI requests. Of these, 34 requests were granted or part-granted, six were refused, one was transferred to another FOI body and two were withdrawn. Under the AIE Regulations, the EPA received 65 requests. Of these, 39 were granted in full or in part, 23 were refused, one was transferred to another public authority and two were withdrawn. Of the requests that were refused, half were technical refusals, i.e. the EPA did not hold the information, the information was already available on the public file or on our website, or the information requested was not deemed to be environmental information under the Regulations. The remaining refusals were based on the exemption provisions in the FOI Act and the mandatory and discretionary grounds for refusal as outlined in the AIE Regulations.

The EPA processed nine Internal Reviews and the original decision was affirmed in six cases with varied decisions or access provided in the remaining three. Two appeals, from the same appellant, to the Commissioner for Environmental Information remained live at the year-end.



A

APPENDICES

A.1 EPA Publications
2015

A.2 Consultants and
Advisers Engaged
in 2015

A.3 Prompt Payment
of Accounts Act
1997

A.4 Financial
Statements



A.1

EPA PUBLICATIONS 2015

The majority of EPA publications are available to download from the [EPA website](http://www.epa.ie/downloads/) <http://www.epa.ie/downloads/>. Some publications are available to purchase either online or from EPA Publications' Sales at +353 916 0642.

AIR

The following air reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/air/>

- ▲ Air Quality in Ireland 2014 – Key Indicators of Ambient Air Quality
- ▲ EPA Licensed Sites – 2014 Report on Air Emissions
- ▲ Interim Status report on the assessment of emissions to air at ENVA Ireland, Portlaoise

CORPORATE

The following corporate reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/other/>

- ▲ A Year in Review – Highlights of 2014
- ▲ Greening the EPA – Our Environmental Performance Report 2013–2014
- ▲ EPA Licensed Sites – Report on Waste Enforcement 2014

WASTE

The following waste reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/waste/>

- ▲ National Waste Prevention Programme (NWPP) Annual Report 2014
- ▲ Farm Hazardous Waste Report 2014
- ▲ Waste Classification – List of Waste and Determining if Waste is Hazardous or Non-Hazardous

WATER

The following water reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/water/>

- ▲ The Quality of Bathing Water in Ireland 2014
- ▲ Drinking Water Report 2013
- ▲ Drinking Water Report 2014
- ▲ Water Quality in Ireland 2010–2012

- ▲ Urban Waste Water Treatment in 2014
- ▲ National Implementation Plan for Domestic Waste Water Treatment Systems 2013
- ▲ National Inspection Plan 2015–2017
- ▲ National Inspection Plan Domestic Waste Water Treatment Systems

GUIDANCE NOTES

The following guidance notes can be found on the EPA website at <http://www.epa.ie/pubs/advice/>

- ▲ Guidance on Financial Provision for Environmental Liabilities
- ▲ Triple Rinse Guide for Empty Pesticide and Dairy Hygiene Containers
- ▲ The WEEE and Batteries Regulations in Ireland – Who Does What?
- ▲ EPA Tips on Home Heating Practices
- ▲ IRL Summary Guidance to Compliance with the ODS and F-Gas Regulations
- ▲ DWSP Note 1 – Radiological Hazards and Associated Risks: Hazardous Event: Nuclear Incident Causing Contamination
- ▲ DWSP Note 2 – Radiological Hazards and Associated Risks: Hazardous Event: Geological Characteristics Causing Contamination
- ▲ DWSP Note 3 – Radiological Hazards and Associated Risks
- ▲ Public Consultation on the National Inspection Plan for Domestic Waste Water Treatment Systems 2015–2017
- ▲ Guidance for Licensees on the Types of Incidents that Should be Reported to the EPA
- ▲ Developing and Assessing Alternatives in Strategic Environmental Assessment (SEA)
- ▲ Integrating Climate Change into Strategic Environmental Assessment in Ireland – A Guidance Note
- ▲ BREF for Mineral Oil and Gas Refineries Parts 1 and 2
- ▲ AER/PRTR Guidance Document No.5 – Electronic Reporting Workbook and Website User Manual

- ▲ Approval of Dosimetry Services in Ireland – Guidance for Applicants
- ▲ Radon Remediation- Advice and Equipment Companies
- ▲ Infographic – Green Business Achievements Phase 2 – June 2011 – November 2014

Environmental Research Reports

Air Quality

The following air quality research reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/research/air/>

- ▲ Assessment of Particulate Air Pollution and Polycyclic Aromatic Hydrocarbons associated with Solid Fuel Usage in Four Towns in Ireland (Research 158)
- ▲ Improved Emissions Inventories for NO_x and Particulate Matter from Transport and Small Scale Combustion Installations in Ireland (ETASCI) (Research 149)
- ▲ Improved Emissions Inventories for NO_x and Particulate Matter, from Transport and Small Combustion Installations in Ireland (ETASCI) (Research 148)

Climate Change

The following climate change research reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/research/climate/>

- ▲ Development of Methodologies and Modelling for Accounting Greenhouse Gases and Organic Carbon Stocks in Agricultural Soils (Research 136)
- ▲ ADAPT: Quantifying the Costs and Benefits Associated with Climate Change Risks and Adaptation (Research 140)
- ▲ Carbon Loss from Drained Organic Soils under Grassland – CALISTO (Research 141)
- ▲ Ensemble of Regional Climate Model Projections for Ireland (Research 159)
- ▲ Modelling Air Quality, Climate Change and Volcanic Ash (Research 147)

Environment and Health

The following environment and health research reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/research/health/>

- ▲ Visualisation and Quantification of the Interaction of Fluorescent Nanoparticles with Ecotoxicologically Relevant Species (Research 156)
- ▲ PALM: A Personal Activity-Location Model of Exposure to Air Pollution (Research 154)

BIODIVERSITY

The following biodiversity research reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/research/biodiversity/>

- ▲ Developing and Assessing Alternatives in Strategic Environmental Assessment (SEA)
- ▲ MOLAND LITE: Land Use Modelling for SEA Alternatives Development and Assessment (Research 157)

Water

The following water research reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/research/water/>

- ▲ Towards Developing a Cryptosporidium Monitoring Protocol (Research 137)
- ▲ Pharmaceuticals in the Aquatic Environment (Research 142)
- ▲ Pharmaceuticals in the Irish Aquatic Environment (Research 143)
- ▲ The Protection of Water Resources: Developing Novel Sensor Materials (Research 144)
- ▲ Development of a Pulsed Light Approach as a Novel Solution in Drinking Water Treatment (Research 145)
- ▲ Assessment of Exposure to Metallic Nanoparticles, focusing on Silver on Marine and Fresh Water Model Organisms at a Cellular and Genetic Level (Research 150)
- ▲ CapE-Capture, Extract, Amplify: A Rapid Method for Monitoring Large Water Volumes for Pathogenic Contaminants (Research 151)
- ▲ Cryptosporidiosis: Human, Animal and Environmental Interface (Research 152)
- ▲ Identifying the Biological and Geographical Origins of Faecal Contamination (Research 153)
- ▲ Water Research in Ireland 2014–2020
- ▲ Public Engagement in Integrated Catchment Management (Research 155)
- ▲ Saltmarsh Angiosperm Assessment Tool for Ireland (SMAATIE) (Research 163)

Waste and Resource Management

The following resource management research reports can be found on the EPA website at <http://www.epa.ie/pubs/reports/research/waste/>

- ▲ A Review of Design and Construction Waste Management Practices in Selected Case Studies – Lessons Learned (Research 146)
- ▲ Investigation of Novel Technologies and New Procedures for Environmental Enforcement (Research 160)

Socio-economics

The following socio-economics research report can be found on the EPA website at <http://www.epa.ie/pubs/reports/research/econ/>

- ▲ CONSENSUS: Consumption, Environment and Sustainability (Research 138)

A.2

CONSULTANTS & ADVISERS ENGAGED IN 2015

Achilles Procurement Services	Cue Vision	Mazars
Acustica	Derilinx	Mason, Hayes & Curran
Amec Earth & Environmental UK Ltd	DHR Communications	Mentoring Services
ASM	EnviroGuide	Penna Plc
Barry Doyle & Company	Geosyntec Consultants	RPS Group
CAAS Ltd	Integrated Risk Solutions	Sinclair Knight Merz (Ireland) Ltd
Carr Communications Ltd	IP Forensics Ireland Limited	Tobin Environmental Services
Clean Technology Centre	JBA Consulting Engineers & Scientists Ltd	URS Ireland Ltd

A.3

PROMPT PAYMENT OF ACCOUNTS ACT 1997

The Environmental Protection Agency comes under the remit of the Prompt Payment of Accounts Act, 1997, which came into effect on 2nd January 1998, and the European Communities (Late Payment in Commercial Transactions) Regulations 2002, which came into effect on 7th August 2002.

It is the policy of the EPA to ensure that all invoices are paid promptly. Specific systems and procedures have been put in place to enable invoices to be tracked and to ensure that payments are made before their due date. Purchase invoices are logged on a daily basis in Accounts Section, and are followed up systematically to ensure that they are certified and returned for payment without delay. Payments are issued as required to ensure prompt payment.

These controls are designed to provide reasonable, but not absolute, assurance against material non-compliance with the Act and Regulations.

There were no late payments with values in excess of €317 during 2015.



Laura Burke
Director General EPA

A.4

FINANCIAL STATEMENTS FOR THE YEAR ENDED 31ST DECEMBER 2015

STATEMENT OF RESPONSIBILITIES OF THE AGENCY

Section 50(1) of the Environmental Protection Agency Act, 1992, requires the EPA to keep, in such form as may be approved by the Minister for the Environment, Community and Local Government with the consent of the Minister for Public Expenditure and Reform, all proper and usual accounts of all monies received or expended by it.

In preparing those financial statements, the EPA is required to:

- ▲ Select suitable accounting policies and apply them consistently;
- ▲ Make judgements and estimates that are reasonable and prudent;
- ▲ Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the EPA will continue in operation;
- ▲ State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in financial statements.

The EPA is responsible for keeping proper books of account which disclose, with reasonable accuracy at any time, the financial position of the EPA and which enable it to ensure that the financial statements comply with Section 50 of the EPA Act. The EPA is also responsible for safeguarding its assets and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

On behalf of the Board of the Environmental Protection Agency:



Laura Burke

Director General
28/06/2016



Micheál O Cinnéide

Director

STATEMENT ON INTERNAL FINANCIAL CONTROL 2015

1. On behalf of the Directors of the EPA, I acknowledge our collective responsibility for ensuring that an effective system of internal financial controls is maintained and operated, for preparing the accounts of the EPA and for complying with all statutory obligations applicable to the EPA.
2. The Directors of the EPA acknowledge also that the system of internal financial controls can provide only reasonable and not absolute assurance that assets are safeguarded, transactions are authorised, properly recorded, and that material errors or irregularities are either prevented or would be detected and rectified in a timely period. While the effectiveness of an internal control system can change over time, the EPA reviews and updates such systems as required.
3. Key Procedures to Provide Effective Internal Financial Control
 - i) The Directors of the EPA have taken steps to ensure an appropriate control environment within the EPA by:
 - ▲ Publishing the EPA Strategic Plan 2013–2015 *Working with Others for a Better Environment*. This Strategy sets out the EPA's Vision, Goals and nine Strategic Priorities. Implementation of the Strategy is monitored and reported to the Board of the EPA on a periodic basis. Agreeing a detailed work programme each year and monitoring and evaluating progress against that work programme on a monthly basis.
 - ▲ Holding regular Board meetings, including monthly management meetings where the Agenda includes strategic issues such as Corporate Governance, Financial Management, Corporate Strategy and staffing matters.
 - ▲ Adopting a set of financial policies and procedures to control the significant financial elements of the EPA's business.
 - ▲ Maintaining a comprehensive schedule of insurances to protect the EPA's interests.
 - ▲ Establishing an Internal Audit Committee, as part of the on-going systematic review of the control environment and governance procedures within the EPA, to oversee the Internal Audit function and advise the Board in relation to the operation and development of that function.
 - ▲ Establishing and operating a Risk Management Policy and Framework, appointing a Risk Committee and a Chief Risk Officer.
 - ▲ Adopting a Policy for monitoring and assessing compliance with corporate legislation.
 - ii) The EPA's Risk Management Policy and Structures are in compliance with the revised Code of Practice for the Governance of State Bodies. The EPA has appointed a Chief Risk Officer and a Risk Committee is in place. The Risk Committee met on three occasions in 2015. A review of Office level risks was completed in 2015 and the All-Office Risk Register was updated. The Corporate Risk Register was updated to reflect changes that had occurred in relation to principal risks and mitigations and sets out the key risks for the Agency. Both the Office and Corporate Risk Registers are subject to regular monitoring and are reviewed by the Risk Committee. The Internal Audit Committee and the EPA Board review the Corporate Risk Register on an annual basis. Each Director provides regular assurance statements to the Board acknowledging responsibility for the on-going update, monitoring and review of the Risk Register for their Office and for ensuring the implementation of the Risk Management Policy.
 - iii) The system of internal financial controls is based on a framework of regular management information, a system of delegation and accountability, and a set of financial and administrative procedures including segregation of duties. In particular it includes:
 - ▲ A comprehensive budgeting system with an annual budget, which is reviewed and approved by the Board of Directors.
 - ▲ The assignment of budgets and budgetary authority and responsibility for specific functions to selected managers. Policies and procedures are in place in relation to budgetary and financial issues.
 - ▲ Restricting authority for final approval of all payments of EPA monies, payment of salaries, pensions, creditors, and expenses etc. (whether by cheque or electronic fund transfer) to Directors and two named Programme Managers.
 - ▲ Segregation of payment transaction processing duties into two steps: (a) – confirmation that goods/services were received and salaries, pensions and expenses were due, by staff responsible for

these transactions and (b) – calculation of the total monies due by the Finance Unit, prior to seeking authorisation for payment.

- ▲ Arrangements for all purchasing to be conducted and controlled through the EPA's financial management system and procedures.
- ▲ Regular and on-going review of payments by senior management.
- ▲ Regular reviews by the Board of periodic and annual financial information and reports (including key financial management information and purchasing commitments), which indicate financial performance against budgets.
- ▲ The application of project management disciplines in respect of building programmes and other major projects.
- ▲ A system of control on the overall approval of capital contracts.
- ▲ Development of an Asset Management Process and Procedures.
- ▲ Adoption and periodic updating of a Corporate Procurement Plan.

iv) The financial implications of business risks have been considered through the formal business risk assessment process and in the preparation of the EPA Internal Audit Plans. These are further assessed and evaluated through the phased implementation of the EPA's Internal Audit Plan. A comprehensive set of Financial Procedures have been put in place to control the significant financial elements of the EPA's business including authorisation limits for purchasing/ expenditure.

v) The EPA's Internal Audit Committee comprises an external Chairperson and other external expertise in lieu of non-executive Director input, together with a senior representative from the EPA.

The EPA Internal Audit Plan 2015–2016 was progressively implemented during the year with audits completed in the areas of:

- ▲ Travel & Subsistence and Salaries; and
- ▲ A Review of Management of Programmes funded by the Department of the Environment, Community & Local Government.

A Value for Money (VFM) Review on the outsourced Air Monitoring Programme was presented to the Internal Audit Committee in 2015. The VFM Review was carried out in line with the guidance set out in the Department of Finance VFM Manual.

Implementation Plans to address audit recommendations are approved by the Audit Committee and the Board of the EPA. Progress on the implementation of the actions in each of the Internal Audit Implementation Plans is regularly reviewed and reported to the Audit Committee and the EPA Board.

The Internal Audit Plan for the period 2016–2017 was drafted during 2015 and reflects the risks identified in the EPA's Corporate Risk Register, the requirements of the Comptroller and Auditor General, and developments and issues in relation to Corporate Governance that have arisen in the Public Sector in general. This Internal Audit Plan was approved by the Internal Audit Committee and by the EPA Board in February 2016.

4. Annual Review of Controls

I confirm that, in addition to the internal audits carried out and referred to in paragraph 3 (v) above, the EPA arranged for a formal independent review, in March 2013, of its compliance with the Code of Practice for the Governance of State Bodies and of the internal control systems in place in the EPA. This review was carried out using external expertise and was based on a detailed examination of governance, financial management and control documentation.

The review found that it was evident that the EPA invests in Corporate Governance and Internal Control processes. It was noted that the EPA has a full-time Corporate Governance Unit with responsibility for overseeing and reporting on the implementation of and compliance with the Code of Practice for the Governance of State Bodies. The review also stated that the EPA has a multitude of policies and procedures covering the key areas of governance and internal control. The policies were reviewed and it was noted that they were adequate and generally in line with good practice.

The report noted also that regular management meetings and workshops are held in the areas of governance and internal control and there is a high level of awareness of the need for a strong system of control throughout the organisation.

The overall conclusion of the review was that:

- ▲ There is a strong system of Corporate Governance in operation within the EPA and the EPA is substantially compliant with the Code of Practice for the Governance of State Bodies.
- ▲ Corporate Governance is at a well-developed stage in the EPA when benchmarked against other state agencies.
- ▲ The control environment in the EPA is generally adequate, with a small number of areas for improvement noted.

An Implementation Plan to address the recommendations of the above review to further enhance the system of internal financial controls was substantially implemented by the end of 2015.

I confirm also that the Directors of the Agency conducted a review of the system of internal controls in the EPA in respect of the period ending 2015.

Signed on behalf of the Board:



Laura Burke

Director General

28 June 2016

COMPTROLLER AND AUDITOR GENERAL REPORT FOR PRESENTATION TO THE HOUSES OF THE OIREACHTAS

Environmental Protection Agency

I have audited the financial statements of the Environmental Protection Agency for the year ended 31 December 2015 under the Environmental Protection Agency Act 1992. The financial statements comprise the statement of income and expenditure and retained revenue reserves, the statement of comprehensive income, the statement of financial position, the statement of cash flows and the related notes. The financial statements have been prepared in the form prescribed under Section 50 of the Act, and in accordance with generally accepted accounting practice.

Responsibilities of the Agency

The Agency is responsible for the preparation of the financial statements, for ensuring that they give a true and fair view and for ensuring the regularity of transactions.

Responsibilities of the Comptroller and Auditor General

My responsibility is to audit the financial statements and to report on them in accordance with applicable law.

My audit is conducted by reference to the special considerations which attach to State bodies in relation to their management and operation.

My audit is carried out in accordance with the International Standards on Auditing (UK and Ireland) and in compliance with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements, sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of:

- ▲ whether the accounting policies are appropriate to the Environmental Protection Agency's circumstances, and have been consistently applied and adequately disclosed
- ▲ the reasonableness of significant accounting estimates made in the preparation of the financial statements, and
- ▲ the overall presentation of the financial statements.

I also seek to obtain evidence about the regularity of financial transactions in the course of audit.

In addition, I read the Environmental Protection Agency's annual report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by me in the course of performing the audit. If I become aware of any apparent material misstatements or inconsistencies, I consider the implications for my report.

Opinion on the financial statements

In my opinion, the financial statements:

- ▲ give a true and fair view of the assets, liabilities and financial position of the Environmental Protection Agency as at 31 December 2015; and of its income and expenditure for 2015; and
- ▲ have been properly prepared in accordance with generally accepted accounting practice.

In my opinion, the accounting records of the Environmental Protection Agency were sufficient to permit the financial statements to be readily and properly audited. The financial statements are in agreement with the accounting records.

Matters on which I report by exception

I report by exception if I have not received all the information and explanations I required for my audit, or if I find:

- ▲ any material instance where money has not been applied for the purposes intended or where the transactions did not conform to the authorities governing them, or
- ▲ the information given in the Environmental Protection Agency's annual report is not consistent with the related financial statements or with the knowledge acquired by me in the course of performing the audit, or
- ▲ the statement on internal financial control does not reflect the Environmental Protection Agency's compliance with the Code of Practice for the Governance of State Bodies, or
- ▲ there are other material matters relating to the manner in which public business has been conducted.

I have nothing to report in regard to those matters upon which reporting is by exception.



Seamus McCarthy

Comptroller and Auditor General
30 June 2016

STATEMENT OF INCOME AND EXPENDITURE AND RETAINED REVENUE RESERVES FOR THE YEAR ENDED 31 DECEMBER 2015

		2015	2014
<u>Income</u>	<u>Note</u>	<u>€'000</u>	<u>Restated</u>
		<u>€'000</u>	<u>€'000</u>
Oireachtas Grants	2(a)	26,949	26,560
Environment Fund Grants	2(b)	16,130	17,918
Emissions Trading Costs Recovered	3(a)	1,210	1,265
Other Services		39	38
Income from Regional Laboratories		1,073	1,045
Income from Radiological Activities	4	1,157	472
Licensing Activities	5	2,440	1,915
Enforcement Activities	6	8,640	7,695
Sundry Receipts	7	353	194
Net Deferred Retirement Benefit Funding	24(c)	7,469	7,232
Total Income		65,460	64,334
Expenditure			
Salaries and PRSI	8	21,680	20,026
Retirement Benefit Costs	24(a)	9,462	9,104
Travelling Expenses	9	1,562	1,459
Laboratory and Field Costs	10	1,420	1,798
Accommodation Costs	11	1,814	1,908
Other Administration Costs	12	6,853	7,381
Consultants	13	26	126
Contractors, Grants and External Service Providers	14	9,119	9,602
Environmental Research	15	6,994	8,220
Depreciation	16	4,774	3,764
Total Expenditure		63,704	63,388
Surplus / (Deficit) for the Year before Appropriations		1,756	946
Transfer from / (to) the Capital Account	17	(918)	(376)
(Deficit) / Surplus on Disposals of Fixed Assets		(290)	11
Surplus / (Deficit) for the Year after Appropriations		548	581
Surplus at 1 January		2,005	1,101
Surplus transferred from RPII		0	323
Surplus at 31 December		2,553	2,005

All income and expenditure for the year relate to continuing activities at the reporting date. The Statement of Income and Expenditure and Retained Revenue Reserves includes all gains and losses recognised in the year.

The Statement of Cash Flows and notes 1 to 29 form part of these financial statements.

On behalf of the Board of the Environmental Protection Agency:



Laura Burke

Director General

Date Signed: 28 June 2016



Micheál Ó Cinnéide

Director

**STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 2015**

	<u>Note</u>	<u>2015</u> <u>€'000</u>	<u>2014</u> <u>Restated</u> <u>€'000</u>
Surplus / (Deficit) after appropriations		548	581
Experience gains on retirement benefit obligations	24(d)	3,308	427
Changes in assumptions underlying the present value of retirement benefit obligations		(1,672)	(19,466)
Transfers into Scheme – RPII Liability assumed		0	(26,778)
Actuarial Gain / (Loss) in the year		1,636	(45,817)
Adjustment to deferred retirement benefits funding		(1,636)	45,817
Other Comprehensive Income for the year		548	581

The Statement of Cash Flows and notes 1 to 29 form part of these financial statements.

On behalf of the Board of the Environmental Protection Agency:



Laura Burke
Director General

Date Signed: 28 June 2016



Micheál Ó Cinnéide
Director

**STATEMENT OF FINANCIAL POSITION
FOR THE YEAR ENDED 31 DECEMBER 2015**

	<u>2015</u>	<u>2014</u>	
<u>Note</u>	<u>€'000</u>	<u>€'000</u>	
Fixed Assets – Property Plant & Equipment	19	37,519	36,964
Current Assets			
Receivables	20	1,394	928
Cash and cash equivalents	21	8,409	12,318
		9,803	13,246
Current Liabilities (amounts falling due within one year)			
Payables	22(a)	(7,468)	(11,509)
Net Current Assets		2,335	1,737
Current Liabilities (amounts falling due after one year)			
Payables	22(b)	(313)	(626)
Total assets less current liabilities before retirement benefits		39,541	38,075
Retirement Benefits			
Retirement benefit obligations	24(b)	182,080	176,246
Deferred retirement benefit funding asset	24(c)	(182,080)	(176,246)
		0	0
Total Net Assets		39,541	38,075
Representing			
Capital account	17	36,988	36,070
Retained Revenue Reserves		2,553	2,005
Other Comprehensive Income for the year		39,541	38,075

The Statement of Cash Flows and notes 1 to 29 form part of these financial statements.

On behalf of the Board of the Environmental Protection Agency:



Laura Burke
Director General

Date Signed: 28 June 2016



Micheál Ó Cinnéide
Director

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2015

	<u>2015</u>	<u>2014</u>
	<u>€'000</u>	<u>Restated</u>
		<u>€'000</u>
Net Cash Flows from Operating Activities		
Excess Income over Expenditure	548	581
Depreciation and Impairment of Fixed Assets	4,774	3,764
(Increase) / Decrease in Receivables	(416)	(76)
Increase / (Decrease) in Payables	(4,041)	468
Bank Interest received	(3)	(9)
Interest Paid	13	18
Deficit / (Surplus) on Disposal of Assets	290	(11)
Transfer to / (from) Capital Account	918	376
Net Cash Inflow from Operating Activities	2,083	5,111
Cash Flows from Investing Activities		
Payments to acquire Property, Plant & Equipment	(5,688)	(4,090)
Proceeds on disposal of fixed assets	19	11
Net Cash Flows from Investing Activities	(5,669)	(4,079)
Cash Flows from Financing Activities		
Bank Interest Received	3	9
Bank Interest Paid	(13)	(18)
Bank Balances transferred from RPII	0	891
Fixed Asset Loan Repayments	(313)	(308)
Net Cash Flows from Financing Activities	(323)	574
Net Increase / (Decrease) in Cash and Cash Equivalents	(3,909)	1,606
Cash and cash equivalents at 1 January	12,318	10,712
Cash and Cash Equivalents at 31 December	8,409	12,318

NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2015

1 Accounting Policies

The basis of accounting and significant accounting policies adopted by the Environmental Protection Agency are set out below. They have all been applied consistently throughout the year and for the preceding year.

a) General Information

The Environmental Protection Agency was set up under the Environmental Protection Agency Act, 1992, with its headquarters at Johnstown Castle Estate, County Wexford.

Primary Objectives – the description of EPA's operations and principal activities is set out in the Annual Report which accompanies these Financial Statements.

The Environmental Protection Agency is a Public Benefit Entity (PBE).

The Radiological Protection (Miscellaneous Provisions) Act 2014 provided for the dissolution of the RPII and the transfer of its staff and functions to the EPA. The EPA and RPII formally merged on 1 August 2014. The Income and Expenditure figures for 2014, therefore, include income and costs of the former RPII from August to December 2014.

b) Statement of Compliance

The financial statements of the Environmental Protection Agency for the year ended 31 December 2015 have been prepared in accordance with FRS 102, the financial reporting standard applicable in the UK and Ireland issued by the Financial Reporting Council (FRC), as promulgated by Chartered Accountants Ireland. These are the Environmental Protection Agency's first set of financial statements prepared in accordance with FRS 102. The date of transition to FRS 102 is 1 January 2014. The prior year financial statements were restated for material adjustments on adoption of FRS 102 in the current year. The result of this adoption can be seen in Note 28.

c) Basis of Preparation

The financial statements have been prepared under the historic cost convention and in the form approved by the Minister for the Environment, Community and Local Government with the concurrence of the Minister for Public Expenditure and Reform under Section 50 of the Environmental Protection Agency Act, 1992. The following accounting policies have been applied consistently in dealing with items which are considered material in relation to the Environmental Protection Agency's financial statements.

d) Revenue

State Grants

Revenue is generally recognised on an accruals basis; one exception to this is in the case of State Grants, which are recognised on a cash receipts basis.

Licensing Activity Income

Applicants for environmental licences are required to pay the full licence application fee at the time of making the application. The amounts received are apportioned to the Statement of Income and Expenditure and Retained Revenue Reserves on completion of the following stages of the licensing process:

Industrial Emissions Directive, Integrated Pollution Control and Waste Management Licences:	Application	30%
	Proposed Determination	50%
	Licence Issue	20%
Waste Water Discharge Licences:	Application	10%
	Acknowledgement of complete application	40%
	Licence Decision Issue	50%

Radiological Protection Licence fees are recognised as income in line with the licence terms. Fees received in advance are shown as income in advance.

Other Revenue

Other revenues are recognised on an accruals basis.

e) Emissions Trading Unit

The Emissions Trading Unit (ETU) was established within the Environmental Protection Agency in 2003. The costs of administering the emissions trading scheme are reimbursed to the EPA by the Department of the Environment, Community and Local Government from the proceeds of the sale of allowances, which are paid directly to the Department.

f) Research Grant Payments

The EPA enters into commitments in respect of research projects awarded for funding. Expenditure on these research projects is charged in the financial statements on the basis of the initial payments which are made on signing of the grant award, interim payments which may be made subject to satisfactory performance and further payments which are issued on receipt and verification of claims in respect of work completed. Costs incurred by the EPA in the implementation of the research programmes are charged to the financial statements as they are incurred.

g) Property, Plant and Equipment

Property, plant and Equipment are stated at cost less accumulated depreciation, adjusted for any provision for impairment. Depreciation is provided on all property, plant and equipment at rates estimated to write off the cost less the estimated residual value of each asset on a straight line basis over their estimated useful lives, as follows:

Buildings	2% per annum
Furniture and Fittings	10% per annum
Laboratory and Field Equipment	15% per annum
Equipment	20% per annum
IT and Computer Equipment	25% per annum
Motor Vehicles	20% per annum

Leasehold improvements are depreciated over the life of the lease.

Residual value represents the estimated amount which would currently be obtained from disposal of an asset, after deducting estimated costs of disposal, if the asset were already of an age and in the condition expected at the end of its useful life.

h) Capitalisation of Internally Developed Software

The external costs of software developed for internal use are capitalised where it can be separately identified as software for use by the Agency and where it is expected to convey business benefits for a number of future years. The salary costs of software development staff are also capitalised.

i) Capital Funding

The fixed assets of the EPA and advances to fund work in progress and asset purchases are met from a combination of capital grants, approved borrowing and allocations from current revenue. Funding sourced from grants (including that used to repay borrowings) is transferred to a capital account which is amortised in line with the depreciation of the related assets.

j) Inventory

All inventory, including consumables, is written off in the year of purchase.

k) Receivables

Receivables are recognised at fair value, less a provision for doubtful debts. The provision for doubtful debts is a specific provision, and is established when there is objective evidence that the Environmental Protection Agency will not be able to collect all amounts owed to it. All movements in the provision for doubtful debts are recognised in the Statement of Income and Expenditure and Retained Revenue Reserves.

l) Operating Leases

Rental expenditure under operating leases is recognised in the Statement of Income and Expenditure and Retained Reserves over the life of the lease. Expenditure is recognised on a straight-line basis over the lease period, except where there are rental increases linked to the expected rate of inflation, in which case these increases are recognised when incurred. Any lease incentives received are recognised over the life of the lease.

m) Employee Benefits

Short-term Benefits

Short-term benefits such as holiday pay are recognised in the year, and benefits that are accrued at year end are included in the Payables figure in the Statement of Financial Position.

Retirement Benefits

The Environmental Protection Agency previously established its own defined benefit pension schemes, which are funded annually on a pay-as-you-go basis from monies available to it, including monies provided by the Department of the Environment, Community and Local Government and from contributions deducted from staff and members' salaries. The Environmental Protection Agency also operates the Single Public Services Pension Scheme ("Single Scheme"), which is a defined benefit scheme for pensionable public servants appointed on or after 1 January 2013. Single Scheme members' contributions are paid over to the Department of Public Expenditure and Reform (DPER).

Pension costs reflect pension benefits earned by employees and are shown net of staff pension contributions from employees where contributions are retained by the Agency. An amount corresponding to the pension charge is recognised as income to the extent that it is recoverable, and offset by grants received in the year to discharge pension payments.

Actuarial gains or losses arising on scheme liabilities are reflected in the Statement of Comprehensive Income, and a corresponding adjustment is recognised in the amount recoverable from the Department of the Environment, Community and Local Government.

The financial statements reflect, at fair value, the assets and liabilities arising from the Environmental Protection Agency's pension obligations and any related funding, and recognise the costs of providing pension benefits in the accounting periods in which they are earned by employees. Retirement benefit scheme liabilities are measured on an actuarial basis using the projected unit credit method.

Pension liabilities represent the present value of future pension payments earned by staff to date. Deferred pension funding represents the corresponding asset to be recovered in future periods from the Department of the Environment, Community and Local Government.

n) Loans

Loans are recognised initially at the transaction price (present value of cash payable, including transaction costs). Loans are subsequently stated at amortised cost. Interest expense is recognised on the basis of the effective interest method and is included in finance costs. Loans are classified as current liabilities unless there is a right to defer settlement of the loan for at least 12 months from the reporting date.

o) Critical Accounting Judgements and Estimates

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the date of the Statement of Financial Position and the amounts reported for revenues and expenses during the year. However, the nature of estimation means that the actual outcomes could differ from those estimates. The following judgements have had the most significant effect on amounts recognised in the financial statements.

Retirement Benefit Obligation

The assumptions underlying the actuarial valuations for which the amounts recognised in the financial statements are determined (including discount rates, rates of increase in the future of compensation levels, mortality rates and healthcare cost trend rates) are updated annually based on current economic conditions, and for any relevant changes to the terms and conditions of the pension and post-retirement plans.

The assumptions can be affected by:

- i)** the discount rate, changes in the rate of return on high-quality corporate bonds
- ii)** future compensation levels, future labour market conditions
- iii)** health care cost trend rates, the rate of medical cost inflation in the relevant regions

		<u>2015</u>	<u>2014</u>
		<u>€'000</u>	<u>€'000</u>
2 State Grants			
Grants from the Department of the Environment, Community and Local Government:			
Oireachtas Grants	Current Subheads C3 and C4.	16,506	15,203
	Capital Subheads C3, C4 and C7.	3,715	4,723
	Other Programmes Subhead B3.	6,728	6,634
		26,949	26,560
Environment Fund Grants	Non-Pay	4,900	4,918
	Research	7,000	8,480
	Other Programmes	4,230	4,520
		16,130	17,918
Total State Grants		43,079	44,478
The Research Funding is a specific allocation to meet the cost of Environmental Research. €7.458M was expended on these research activities in 2015 (2014 – €8.263M).			
3 Emissions Trading Unit (ETU) Activities		<u>€'000</u>	<u>€'000</u>
(a) Cost of Emissions Trading Unit:			
	Emissions Trading Operator Registration Fees, etc.	4	4
	Costs to be recovered from Auction Funds, etc.	1,206	1,261
Total Funding of ETU Costs		1,210	1,265
(b) Summary of Emissions Trading Unit Funds:			
	ETU Operator Fees Received	0	4
	Aviation Fees Received	4	0
Total Funds Generated		4	4
	Funds Carried Forward	195	325
	Funds Received from the Department of the Environment, Community & Local Government	1,280	1,131
	Total Current Year ETU Costs recovered	(1,210)	(1,265)
Balance of ETU Funds Carried Forward (see Note 22(a)).		269	195
4 Income from Radiological Activities		<u>€'000</u>	<u>€'000</u>
	Calibration Service	49	16
	Radon Measurement Service	83	48
	Radiation Monitoring Service	280	89
	Licence Fees	721	316
	Miscellaneous / Contract Income	24	3
Total Income from Radiological Services		1,157	472
5 Licensing Activities – IED & IPC, Waste and WWD		<u>€'000</u>	<u>€'000</u>
	Licence Fees prepaid at 1 January	2,798	4,326
	Fees Received	680	387
	Less Refunds Paid	0	0
	Licence Fees prepaid at 31 December (see Note 22(a))	(1,038)	(2,798)
Amount credited to Income and Expenditure Account		2,440	1,915

Licensing: Industrial Emissions Directive (IED), Integrated Pollution Control (IPC) and Waste

Under Section 83 of the Environmental Protection Agency Act, 1992 the EPA is responsible for the licensing of large/complex industrial and other processes with significant polluting potential. Under Section 40 of the Waste Management Act, 1996 the EPA is responsible for the licensing of all significant waste recovery & disposal activities operated by local authorities and private enterprise.

Licensing: Waste Water Discharges (WWD)

The Waste Water Discharge (Authorisation) Regulations 2007 provide for the licensing of local authority waste water discharges.

Discharges from areas that serve over 500 population equivalent require a licence from the EPA. Areas that serve less than 500 population equivalent are required to be certified by the EPA.

The EPA's licensing income arises from fees charged in respect of processing such licensing applications.

	2015	2014
	€'000	€'000
6 Enforcement Activities – IED & IPC, Waste, WWD and Drinking Water		
Enforcement Charges Invoiced	8,452	7,576
Enforcement Income from Prosecutions	188	119
Total Income from Enforcement Activities	8,640	7,695

Under Section 96 of the Environmental Protection Agency Act, 1992 the EPA is responsible for the regulation of large/complex industrial and other processes with significant polluting potential. Under Section 15 of the Waste Management Act, 1996 the EPA is responsible for the regulation of all significant waste recovery and disposal activities operated by local authorities and private enterprise. Under the Waste Water Discharge (Authorisation) Regulations 2007 the EPA is responsible for the regulation of waste water discharges. Under the European Union (Drinking Water) regulations 2014 the EPA may charge for monitoring the quality of water supplies intended for human consumption.

The EPA's enforcement income arises from fees charged in respect of this enforcement work.

	2015	2014
	€'000	€'000
7 Sundry Receipts		
Sales of publications	1	0
Bank deposit interest	3	9
Sundry Receipts	349	185
	353	194

	2015	Restated
	€'000	€'000
8 Salaries and PRSI of Staff		
Salaries	20,082	18,436
Employers' PRSI	1,703	1,590
Total Salary Costs	21,785	20,026
IT Development Salary costs capitalised	(105)	0
Salary Costs charged to the Statement of Income and Expenditure and Retained Revenue Reserves	21,680	20,026

The total Salary cost of €21,784K includes an accrual of €690K (2014 €660K) in respect of accumulated staff annual leave entitlements.

(a) Analysis of staff salary costs in excess of €60,000:

The number of employees whose employee benefits fell within each band of €10,000 from €60,000 upwards is as follows:

	2015	2014
€60,000 to €70,000	119	116
€70,000 to €80,000	19	21
€80,000 to €90,000	23	20
€90,000 to €100,000	7	7
€100,000 to €110,000	0	0
€110,000 to €120,000	2	3
€120,000 to €130,000	2	0
€130,000 to €140,000	1	2
€140,000 to €150,000	0	0
€150,000 to €160,000	1	1

(b) Analysis of staff by location:	Headquarters	144	141
	Regional Inspectorate Castlebar	25	27
	Regional Inspectorate Cork	43	41
	Regional Inspectorate Dublin	122	121
	Regional Inspectorate Kilkenny	18	20
	Regional Inspectorate Monaghan	12	12
	Regional Offices	4	4
		368	366

Board Members' Emoluments	Board	Vouched	Meetings
Board Member	Fees	Expenses	attended
Laura Burke (Director General)	0	643	13
Dara Lynott (Deputy Director General)	0	443	11
Ann McGarry	0	3,783	12
Gerard O'Leary	0	403	12
Matthew Crowe	0	0	12
Micheal O' Cinneide	0	189	13
	0	5,461	

During 2015, thirteen General Board meetings were held.

Board Member Expenses

Travel and Subsistence expenses incurred in attending Board meetings are reimbursed at the rates applicable for the Civil Service. Expenses paid to Directors in relation to attendance at Board meetings in 2015 amounted to €5,461 broken down €3,732 mileage, €1,632 subsistence and €97 other costs. The 2014 total was €2,759 (€1,866 mileage, €543 subsistence and €350 other expenses).

The Directors of the Environmental Protection Agency are full time executive Directors. They are paid an inclusive salary and consequently no Directors' or Board fees are paid. Key management personnel in the EPA consist of the Director General and the 5 members of the Board of Directors. Total compensation paid to key management personnel, including Directors' salaries, vouched expenses and the Director General's remuneration amounted to €869K (2014 – €778K).

The Director General received a salary of €153,162 in 2015 (2014 – €153,162) and is also entitled to pension benefits in line with the standard entitlements of the Environmental Protection Agency (Director General and Director) Staff Superannuation Scheme, 1996.

	2015	2014
	€'000	€'000
9 Travelling Expenses		
Travel and Subsistence	1,424	1,311
Motor Vehicle Expenses	148	162
Travel Refunds	(10)	(14)
	1,562	1,459

Staff Development & Training Costs

A sum of €129,114 (2014 – €108,127) in respect of travelling expenses is included under staff development and training costs at Note 12.

10 Laboratory and Field Costs	€'000	€'000
Laboratory and Field Expenses	974	1,373
Equipment Repairs and Maintenance	421	412
Protective Clothing	25	13
	1,420	1,798

11 Accommodation Costs	€'000	€'000
Rent and Rates	613	623
Power, Light and Heat, Cleaning	650	654
Repairs, Maintenance, Security	551	631
	1,814	1,908

12 Other Administration Costs	€'000	€'000
Telephone and Postage	339	313
Printing of Publications and Stationery Supplies	243	291
Insurance	167	157
Computer and Data Processing Charges	3,290	3,758
Audit Fees	22	16
Corporate Governance and Internal Audit Costs	24	40
Legal Fees	1,130	1,594
Staff Appointment and other related costs	80	42
Bank Interest and Charges	11	8
Books, Periodicals and Library	62	30
Staff Development and Training Costs	672	598
Advertising	68	81
Communications	557	306
Loan Interest	13	18
Sundries	175	129
	6,853	7,381

13 Consultancy Costs	€'000	€'000
Consultants	26	126
	26	126

The work programme activities which made use of these consultancies were:	€'000	€'000
Emissions Trading Unit	0	67
Communications and Corporate Services	26	59
	26	126

14 Contractors, Grants and External Service Providers	€'000	€'000
Contractors	3,205	3,360
Grants	2,238	4,148
External Service Providers	3,676	2,094
	9,119	9,602

The main work areas which incurred costs under this heading were:	€'000	€'000
Communications and Corporate Services	448	687
Water Quality Monitoring and Assessment (WFD) Programme	1,730	2,386
Environmental Enforcement	2,163	3,326
National Waste Prevention Programme	2,015	2,265
Environmental Assessment	1,681	419
Emissions Trading Unit	212	126
Climate, Licensing and Resource Use	662	303
Radiological Protection	208	90
	9,119	9,602

Since 2013, the EPA in conjunction with Galway County Council have managed the East Galway Landfill site, following the liquidation of the Greenstar operating company. Grant payments of €1,026K (2014 €1,618K) made to Galway County Council to fund this activity are included in the Environmental Enforcement figures above.

	2015	2014
	€'000	€'000
15 Environmental Research		
EPA Research Programme	7,458	8,263
Co-Funding Research Income	(464)	(43)
Research Programme Payments	6,994	8,220

The current EPA environmental research programme was launched in 2014. It is being funded through the Environment Fund. The research programme aims to fund research that will address key environmental management issues, which will ultimately protect and improve the natural environment. In 2015 the EPA Research Programme expenditure of €7.458M includes Grant Payments of €6.552M and implementation and activity costs of €906K. A further €251K of grant payments to research projects is included in the Grants figure at Note 14.

At 31 December 2015 commitments entered into but not yet charged to the financial statements in respect of Research projects amounted to €21.380M (2014 – €17.445M) with the following breakdown:

	€'000	€'000
Outstanding Grant Commitments at 1 January	17,445	16,063
Grants Approved during the year	11,254	10,963
Grants Decommitted during the year	(516)	(1,851)
Grant Payments made in the year	(6,803)	(7,730)
Outstanding Commitments at 31 December	21,380	17,445

These figures exclude EPA implementation costs in respect of Research programmes.

16 Depreciation of Fixed Assets

Depreciation of Property, Plant and Equipment (Note 19)	4,774	3,764
	4,774	3,764

17 Capital Account

	€'000	€'000
At 1 January 2015		36,070
Transfer from Income and Expenditure Account:		
Income Allocated for Capital purposes		
– Fixed Asset Additions	5,638	
– To Fund Future Additions	50	
– Repayment of Loans	313	
	6,001	
Less:		
Disposals	851	
Less prior depreciation on disposals	(542)	
	309	
Depreciation charge for year	4,774	
Net Transfer from Income and Expenditure Account		918
At 31 December 2015		36,988

At 31 December 2015 the Capital Account balance includes €107,000 (2014 – €57,000) in respect of prepayments for fixed assets (see Note 20 – Receivables).

18 Taxation

The EPA is specifically exempted under the provisions of Section 32, and Schedule 2, of Finance Act, 1994. Accordingly no taxation charges have been included in the accounts.

19 Fixed Assets - Property, Plant & Equipment

	<u>Total</u>	<u>Buildings</u>	<u>Furniture & Fittings</u>	<u>IT & IS Equipment</u>	<u>Lab & Field Equipment</u>	<u>Motor Vehicles</u>
<u>Cost</u>	<u>€'000</u>	<u>€'000</u>	<u>€'000</u>	<u>€'000</u>	<u>€'000</u>	<u>€'000</u>
At 1 January 2015	69,152	40,794	3,888	12,573	10,696	1,201
Additions	5,638	345	107	4,003	1,081	102
Disposals	(851)	(112)	(229)	(1)	(418)	(91)
At 31 December 2015	73,939	41,027	3,766	16,575	11,359	1,212

Depreciation

At 1 January 2015	32,188	10,283	3,362	8,341	9,272	930
Charge for Year	4,774	811	172	3,077	592	122
On Disposals	(542)	(9)	(183)	(1)	(258)	(91)
At 31 December 2015	36,420	11,085	3,351	11,417	9,606	961

Net Book Value

At 31 December 2015	37,519	29,942	415	5,158	1,753	251
At 31 December 2014	36,964	30,511	526	4,232	1,424	271

The EPA headquarters building was constructed by the Office of Public Works (OPW) who financed the construction by means of a commercial loan. The EPA funds the annual repayments made by the OPW. The interest element of the repayments met by the EPA is accounted for in the year it arises.

Both the asset and the associated funding arrangements have been recorded in the books of the EPA to reflect the substance of the underlying transactions.

The EPA regional inspectorate building at Seville Lodge, Kilkenny was constructed by the Office of Public Works on a site acquired for the EPA. The legal transfer of the site to the EPA is being processed by the OPW through the Chief State Solicitor's Office.

In 2015 the EPA capitalised €2.925M (2014 – €1.377M) in respect of the external cost and €105K in respect of the internal salary cost of software development for internal use. This is in line with our Accounting Policy for Capitalisation of Internally Developed Software.

	<u>2015</u>	<u>2014</u>
	<u>€'000</u>	<u>€'000</u>
20 Receivables		
Debtors	1,287	871
Prepayments for Fixed Assets	107	57
	1,394	928

Prepayments for Fixed Assets:

At 31 December 2015 prepayments totalling €107,000 (2014 – €57,000) had been made as set out hereunder. These prepayments have been included in the amounts transferred from the Income and Expenditure Account to the Capital Account.

Advances to the Office of Public Works (OPW)

At the end of 2015 the OPW held advance payments of €16,960 in respect of minor capital works and furniture.

In December 2014 an advance payment of €40,000 was made to the OPW for window blinds.

A further advance payment of €50,000 was made to OPW in respect of blinds in 2015.

All debtors fall due within one year.

<u>21 Cash and Cash Equivalents</u>	<u>€'000</u>	<u>€'000</u>
Cash and Bank Balances	8,409	12,318

Prepaid Licensing income (see Note 5) accounts for €1.038M (2014 – €2.798M) of the Bank balances at the Balance Sheet date.

	<u>2015</u>	<u>2014</u>
	<u>€'000</u>	<u>€'000</u>
22 Payables		
(a) Amounts falling due within one year:		
Licence Fees (see Note 5)	1,038	2,798
Radiological Protection Licence Fees Prepaid	635	533
ETU Funds on Hands (see Note 3(b))	269	195
Trade and Other Expenses	5,200	7,657
Amounts due to OPW in relation to loan repayments	326	326
	7,468	11,509
Included in Trade and Other Expenses above are the following amounts due to revenue:		
Professional Service Withholding Tax	486	460
PAYE/PRSI/USC	610	597
VAT	271	146
Relevant Contract Tax	24	0
	1,391	1,203
(b) Amounts falling due after one year:		
Amounts due to OPW in relation to loan repayments	313	626

23 Borrowings

The EPA headquarters building in Wexford was constructed by the Office of Public Works (OPW), who financed the construction by means of a 20 year commercial loan. The EPA funds the annual repayments made by the OPW. Both the asset and the associated borrowings are recorded in the books of the EPA to reflect the substance of the underlying transactions.

Repayable within one year	326
Repayable between one and two years	313

24 Retirement Benefit Costs

	<u>2015</u>	<u>2014</u>
	<u>€'000</u>	<u>€'000</u>
(a) Analysis of total retirement benefit costs charged to the Statement of Income and Expenditure and Retained Revenue Reserves		
Current Service Cost	6,650	4,933
Interest on retirement benefit scheme liabilities	3,847	5,113
Employee Contributions	(1,035)	(942)
	9,462	9,104
(b) Movement in net retirement benefit obligations during the financial year	€'000	€'000
Net retirement benefit obligation at 1 January	176,246	123,197
Obligations assumed in respect of RPII pension scheme at 1 August 2014	0	26,778
Current service costs	6,650	4,933
Interest costs	3,847	5,113
Actuarial (gain) / loss	(1,635)	19,039
Pensions paid in the year	(3,028)	(2,814)
Net retirement benefit obligation at 31 December	182,080	176,246

(c) Deferred Funding for Retirement Benefits

The EPA recognises these amounts as an asset corresponding to the unfunded deferred liability for retirement benefits on the basis of the set of assumptions described below and a number of past events. These events include the statutory basis for the establishment of the retirement benefit schemes, and the policy and practice currently in place in relation to funding public service pensions including contributions by employees and the annual estimates process. The EPA has no evidence that this funding policy will not continue to meet such sums in accordance with current practice.

The net deferred funding for retirement benefits recognised in the Statement of Income and Expenditure and Retained Revenue Reserves was as follows:

	<u>€'000</u>	<u>€'000</u>
Funding recoverable in respect of current year retirement benefit costs	10,497	10,046
State grant applied to pay retirement benefits	(3,028)	(2,814)
	7,469	7,232

The deferred funding asset for retirement benefits at 31 December 2015 amounted to €182.080M (2014 – €176.246M).

(d) History of defined benefit obligations	2015	2014	2013	2012	2011
	<u>€M</u>	<u>€M</u>	<u>€M</u>	<u>€M</u>	<u>M</u>
Defined benefit obligations	182	176	123	123	104
Experience gains / (losses) on defined benefit scheme liabilities:					
Amount (€M)	3.308	0.427	6.5	-0.1	-1.0
Percentage of Scheme Liabilities	1.8%	0.2%	5.3%	-0.1%	-1.0%

The cumulative actuarial loss recognised in the Statement of Total Recognised Gains and Losses amounts to **€56.340M**.

(e) General Description of the Schemes

The schemes are defined benefit final salary pension arrangements with benefits and contributions defined by reference to current “model” public sector scheme regulations. The schemes provide staff members with a pension (being 1/80 per year of service), a gratuity or lump sum (being 3/80 per year of service) and spouse’s and children’s pensions. Normal Retirement Age is a member’s 65th birthday, and pre-2004 members have an entitlement to retire without actuarial reduction from age 60. The schemes provide Board members with a pension (being 1/48 per year of service), a gratuity or lump sum (being 1/32 per year of service) and spouse’s and children’s pensions. Board members are entitled to retire when their contract ends. Pensions in payment (and deferment) normally increase in line with general public sector salary inflation.

The valuation used for FRS 102 disclosures has been based on a full actuarial valuation performed on 25 February 2016 by a qualified independent actuary, taking account of the requirements of the FRS in order to assess the scheme liabilities at 31 December 2015.

The principal actuarial assumptions were as follows:

	2015	2014
Future salary increases	2.65%	2.25%
Future retirement benefit increases	2.15%	1.75%
Future state pension increases	1.65%	1.25%
Discount rate	2.55%	2.20%
Future inflation	1.65%	1.25%
Revaluation in deferment	2.15%	1.75%

Mortality

Mortality Pre-Retirement – Male: 62% of PNML00, Female 70% of PNFL00.

Mortality Post-Retirement – Male: 58% of ILT15, Female 62% of ILT15.

The mortality basis adopted explicitly allows for improvements in life expectancy over time, so that life expectancy at retirement will depend on the year in which a member attains retirement age. The table below shows the life expectancy for members attaining age 65 in 2015 and 2035.

Year of attaining age 65	2015	2035
Life expectancy – male	85.9	88.5
Life expectancy – female	88.5	90.6

25 Kerdiffstown Emergency Response

In 2011, the Environmental Protection Agency took the lead in co-ordinating the emergency response to an underground landfill fire at Kerdiffstown, Naas and took charge of the subsequent management of the site. The total cost of this work in 2015 was €592K (2014 – €1,583K) and this cost is reflected under the following cost headings in these financial statements:

	<u>2015</u>	<u>2014</u>
	<u>€'000</u>	<u>€'000</u>
Note 10 Laboratory and Field Costs - Site Operations, Waste Disposal, etc.	240	716
Note 11 Accommodation Costs – Mainly Security costs of the site.	199	392
Note 12 Other Administration Costs – Mainly Communications, Health and Safety and Insurance costs.	20	36
Note 14 Contractors and External Service Provider Costs – Mainly personnel for site operational work, etc.	122	424
Note 9 Travelling Expenses – Travel and Subsistence costs of EPA staff.	11	15
Total Costs Incurred	592	1,583

The ongoing involvement of the EPA in the management of the Kerdiffstown site ceased on 12 June 2015, when Kildare County Council assumed the lead in management of the site.

Fixed Assets (mainly landfill gas flaring systems, site security systems and fencing and site offices), which cost €727K, and which had a net book value of €309K, were transferred at no cost to Kildare County Council at the handover date.

26 Lease Commitments

At 31 December 2015 the Environmental Protection Agency had the following future minimum lease payments under non – cancellable operating leases for each of the following periods:

	<u>2015</u>
	<u>€'000</u>
Payable within one year	676
Payable within two to five years	1,321
Payable after five years	1,617

Operating lease payments recognised as an expense were €583K (2014 – €627K).

27 Related Party Disclosures

The EPA has adopted procedures to govern its decision making in accordance with the Environmental Protection Agency Act, 1992 and the Ethics in Public Office Act, 1995 and regulations made thereunder. These procedures have been adhered to by the EPA during the year.

28 Transition to FRS 102

Reconciliation of Capital and Reserves

	<u>As at</u>	<u>As at</u>
	<u>01-Jan-14</u>	<u>31-Dec-14</u>
	<u>€'000</u>	<u>€'000</u>
Capital and reserves (as previously stated)	36,696	38,075
Holiday pay accrual	(637)	0
Capital and reserves (as restated)	36,059	38,075

Reconciliation of Surplus for the year

	<u>Year ended</u>
	<u>31-Dec-14</u>
	<u>€'000</u>
Deficit for the year (as previously stated)	(56)
Holiday pay accrual provided at 31 December 2013 – reversing.	637
Surplus for the year (as restated)	581

(a) Holiday Pay Accrual

Prior to 2014, the EPA had not accrued for holiday pay earned by employees but not availed of at the reporting date. In 2014, an accrual of €660K was recognised in the financial statements for the first time and in 2015 the accrual recognised was €690K. Under FRS 102, the financial statements must recognise such accruals. The holiday pay accrual which was not recognised in 2013 was €637K. This accrual must now be recognised in the 2013 figures.

The impact of this change for EPA is an increase of €637K in Payables at the transition date – 1 January 2014. The surplus is reduced by €637K in the year ended 31 December 2013. This €637K accrual reverses in the year ended 31 December 2014, and consequently the result for 2014 is increased by €637K. As the EPA had already accrued for holiday pay in 2014 and 2015, no further adjustments are required.

29 Approval of Financial Statements

The Financial Statements were approved by the Board of Directors on 28 June 2016.

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 comhlíonta comhshaoil a chur i bhfeidhm chun torthaí maíthe comhshaoil a sholáthar agus chun díriú orthu siúd nach gcloíonn leis na córais sin.

Eolas: Soláthraimid sonraí, faisnéis agus measúnú comhshaoil atá ar ardchaighdeán, spríodhártha 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 maíthe, 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 diantalmhaíocht (*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 húdaráis áitiúla agus le gníomhaireachtaí eile chun dul i ngleic le coireanna comhshaoil trí chomhordú a dhéanamh ar líonra forfheidhmiúcháin náisiúnta, trí dhírú ar chiontóirí, agus trí mhaoirsiú a dhéanamh ar leasúchán.
- Cur i bhfeidhm rialachán ar nós na Rialachán um Dhramhthrealamh Leictreach agus Leictreonach (DTLL), um Shrian ar Shubstaintí Guaiseacha agus na Rialachán um rialú ar shubstaintí a ídionn an ciseal ózón.
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaoil.

Bainistíocht Uisce

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

Monatóireacht, Anailís agus Tuairiscíú 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.
- Tuairiscíú neamhspleách le cabhrú le cinnteoireacht an rialtais náisiúnta agus na n-údarás áitiúil (*m.sh. tuairiscíú 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 shainaitheint, bonn eolais a chur faoi bheartais, agus réitigh a sholáthar i réimsí na haeráide, 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 leibhéal radaíochta, measúnacht a dhéanamh ar nochtadh mhuintir na hÉireann don radaíocht ianúcháin.
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as taimí 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 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 ghníomhaíocht á bainistiú ag Bord lánaimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóirí. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig Aeráide, Ceadúnaithe, Taighde agus Úsáide Acmhainní
- An Oifig Forfheidhmithe i leith cúrsaí Comhshaoil
- An Oifig um Measúnú Comhshaoil
- An Oifig um Cosaint Raideolaíoch
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

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



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An Ghníomhaireacht um Chaomhnú Comhshaoil

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