



**ENVIRONMENTAL PROTECTION AGENCY
2019 in Review**

Key Statistics — 2019 in Numbers

AUTHORISATIONS

132

environmental authorisations issued

80

authorisation amendments completed

1,304

radiation authorisations (1268 renewals; 36 new) and 1168 technical amendments issued

62

conclusions on Article 27 by-product notifications

4

End-of-waste decisions made

ENFORCEMENT

299

urban wastewater and 62 drinking water site visits

1,485

visits to industrial, waste, dumping at sea and VOC facilities

12

prosecutions heard

80

inspections of Radiological Licensees

20

drinking water Directions issued to Irish Water

11

sites on the National Priority Sites for Enforcement in 2019; the food and drink and waste sectors accounted for the majority of sites on the list

CIRCULAR ECONOMY

765

businesses are registered on the national repair directory (repairmystuff.ie) and the site has approximately 7,500 monthly users

400

people trained on food waste reduction through workplace and community-based Stop Food Waste Challenges

50

resource efficiency assessments identified cost savings of €6,336 per farm and average GHG emission reductions of 10%

2,300+

over 23,000 people engaged with the Stop Food Waste programme by following social media channels; while 2,300 subscribed to receive the quarterly e-Newsletter

800+

over 800 companies and public bodies have used the TREE online tool to assess resource efficiency performance and to generate a tailored action plan for improvement

INFORMATION

1,160,132

sessions on www.epa.ie

40,400+

Twitter followers

7,500+

environmental complaints reported

This includes:

- 3,600+ via See it? Say it? App;
- 2,000+ via National Complaints Line;
- 1,800+ direct to EPA (which includes 685+ about licensed activities and 20+ about drinking water supplies)

2,411

environmental queries from the public

293

EPA datasets uploaded to data.gov.ie (35,496 total views)

149

information requests (84 AIE and 65 FOI)

AIR QUALITY MONITORING

19

new air quality monitoring stations added to the network



epaResearch

Climate - Water - Sustainability

Identifying pressures • Informing policy • Developing solutions

43

research reports published: Water (8); Climate (17); Sustainability (18)

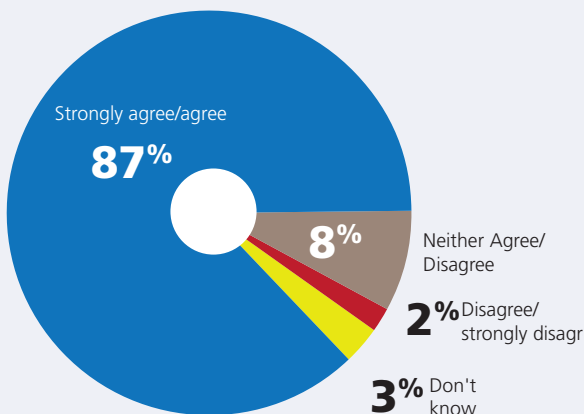
Strategic Goals for the period 2016-2020

Goals	Objectives	Outcomes What we will have achieved by 2020
Trusted Environmental Regulator	<p>Ensure the on-going development of a proportionate and effective regulatory approach.</p> <p>Align EPA resources to target interventions and reduce environmental risk.</p>	<ul style="list-style-type: none"> ▲ A risk-based, responsive regulatory approach that engages stakeholders and protects the environment and people. ▲ Reduced environmental risks at EPA regulated facilities through tailored interventions and by ensuring appropriate financial provisions are in place. ▲ Driven the improved delivery and management of water and waste infrastructure.
Leader in Environmental Evidence & Knowledge	<p>Realise the full potential of the EPA's knowledge, skill, expertise and regional presence as key national resources in the protection of the environment and human health.</p> <p>Accelerate the provision of timely and tailored information to meet the specific needs of stakeholder groups.</p>	<ul style="list-style-type: none"> ▲ More timely evidence-based environmental assessments to inform policy and decision making at national, regional and local levels. ▲ Better provision of online, up-to-date and accessible information on the environment to stakeholders. ▲ A research programme that addresses knowledge gaps and helps identify solutions to emerging and complex environmental problems.
Effective Advocate and Partner	<p>Strengthen the EPA's capability and capacity to influence, advocate and partner to help achieve a clean, healthy and well protected environment.</p> <p>Engage the public in the protection and improvement of the environment.</p> <p>Promote a greater awareness of the impact of environment quality on human health.</p>	<ul style="list-style-type: none"> ▲ Targeted opportunities to integrate environmental priorities and sustainability into sectoral, economic and social policies. ▲ Developed public participation programmes to increase awareness of environmental issues and support the engagement of the public in environmental protection. ▲ Collaborated with health agencies and other bodies to realise the benefits of a good environment for health and wellbeing.
Responding to Key Environmental Challenges	<p>Tackle the challenges to deliver improved water quality in Ireland.</p> <p>Engage with other strategic partners to promote the development of a holistic national response to climate change.</p> <p>Enhance air and radiation protection in Ireland.</p> <p>Engage with strategic partners to deliver effective regulation of the waste sector.</p>	<ul style="list-style-type: none"> ▲ Effective and resilient structures in place to deliver better outcomes for water quality. ▲ An authoritative climate change secretariat that supports the National Dialogue on Climate Action /Climate Change Advisory Council and the national transition to a low carbon and climate resilient society and economy. ▲ Strengthened the air quality and radiation protection frameworks to further protect people and the environment. ▲ Strengthened national waste enforcement measures protecting people and the environment
Organisationally Excellent	<p>Develop our staff and align our organisation to deliver best environmental outcomes.</p> <p>Focus on the development and promotion of organisational health, wellbeing and safety at work.</p> <p>Promote a culture of leadership, reform and innovation.</p>	<ul style="list-style-type: none"> ▲ Our functions and resources aligned to be responsive and adaptable to meet emerging challenges. ▲ Engaged all staff to foster a supportive workplace environment. ▲ Enhanced capacity in the area of organisational change and in the use of ICT to support reform and innovation.

Climate Change

There is global acceptance that we are in a climate crisis, but it has not arrived suddenly or without warning. Air and water pollution, contamination of land and biodiversity loss continue to be incremental challenges to the environment and our health. Scientific evidence from the EPA and others has informed us that our current production and consumption processes, behaviours and value systems are not compatible with ensuring a sustainable, healthy and prosperous society and environment for the future. Urgent collective action and behavioural change, is now required to meet Ireland's long-term goals.

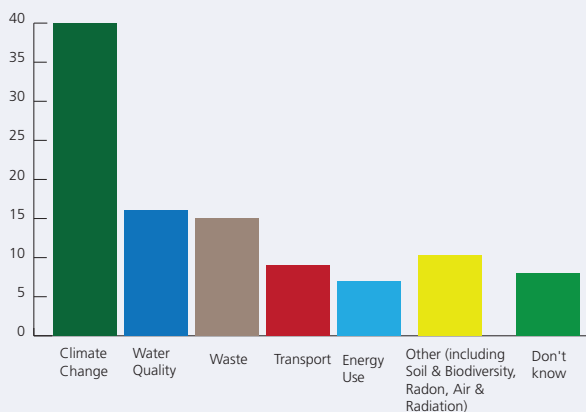
Public Opinion: The environment is a valuable asset to the people of Ireland



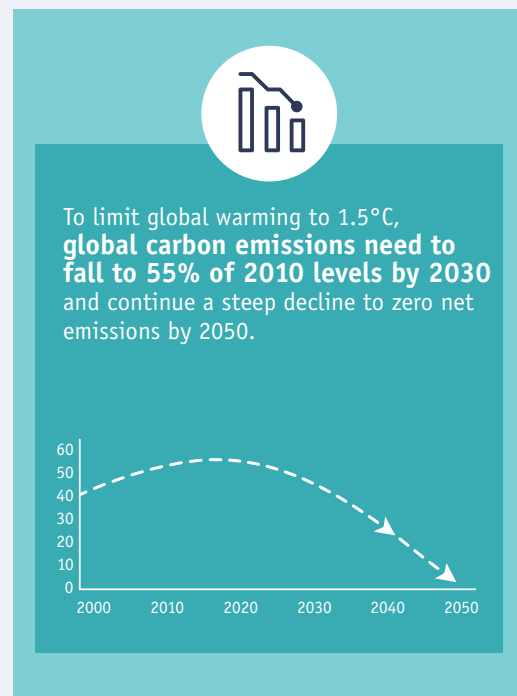
Survey carried out by Red C on behalf of the EPA, January 2020.
Base All Adults 18+; n=1,019

There is good awareness among the public of Ireland's environmental challenges. Results of a recent opinion poll undertaken by the EPA showed that 87% of adults agree that the environment is a valuable asset to the people of Ireland. In addition, 58% of adults placed climate change among the top three most pressing environmental challenges facing Ireland with one third stating that it affects them personally.

Public Opinion: What do you believe are the most pressing environmental issue(s), if any, facing Ireland



Survey carried out by Red C on behalf of the EPA, January 2020.
Base All Adults 18+; n=1,019



Source: EPA - Ireland's greenhouse gas emissions - www.epa.ie/ghg/documents/

In June 2019, the Government set out a course of action to address climate issues over the coming years with the publication of the Climate Action Plan. This measure will facilitate a positive response to the fact that Ireland had ranked as the worst performing EU member state in its progress towards decarbonisation.

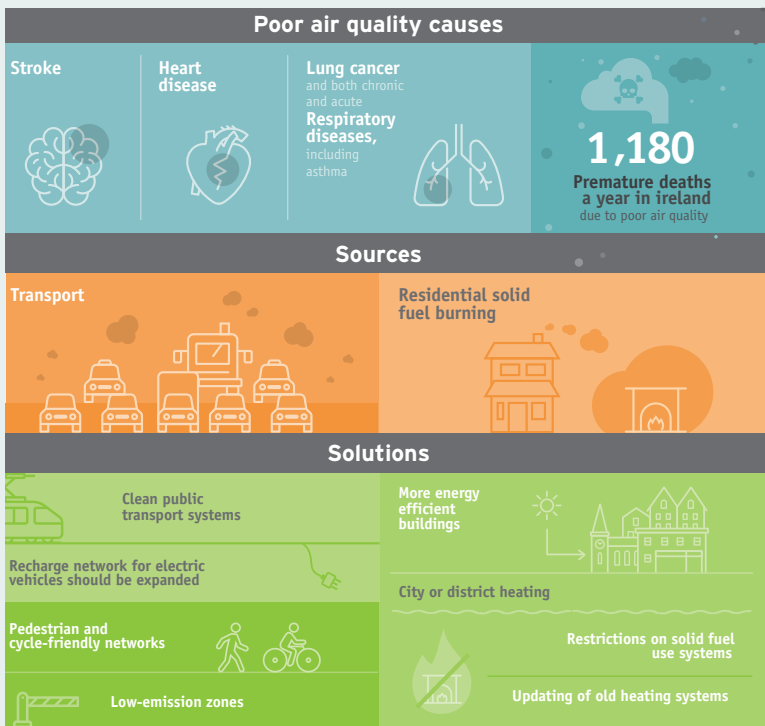
The EPA is addressing climate change challenges by: collating national greenhouse gas emissions and projections; regulating emissions from industrial sectors; supporting climate science research; supporting change in behaviour to promote a circular economy and facilitating the National Dialogue on Climate Action.

The evidence produced by the EPA, throughout 2019, indicates that Ireland will not meet its emissions targets for 2030. Only full implementation of the Government programmes, policies and measures will result in a projected decrease in greenhouse gas emissions in the long term. Building upon public awareness and willingness to act will be key to achieving Ireland's long-term goals.

Environment and Health

The environment is intrinsically linked to our health and wellbeing. Threats to that environment have a direct impact on the lives of individuals and communities. The EPA plays an important role on behalf of the State in monitoring threats, informing the public and enforcing regulatory measures.

Estimates show there are 1,180 premature deaths in Ireland due to poor air quality. Coinciding with World Lung Day in September, the EPA published its annual air quality report for 2018 indicating air quality complied with EU legal standards but exceeded guideline values set by the World Health Organization. The two main pollutants are particulate matter from domestic burning of solid fuels and nitrogen dioxide from fossil-fuelled vehicles in urban areas. Home heating and transport are impacting air quality and affecting people's health which needs to be addressed.



Evidence from a recent EPA opinion poll show that the public are willing to change their behaviour with 62% of adults willing to change to smokeless fuel to heat their home and 43% willing to change to an electric or hybrid vehicle to reduce pollution and greenhouse gases.

The EPA continued to strengthen the capacity and capability of the air quality network, under the National Air Quality Monitoring Programme 2017–2022, adding 19 new monitoring stations in 2019, bringing the total across Ireland to 69.

In Ireland, research indicates up to 300 cases of lung cancer each year are linked to the radioactive gas Radon, the leading cause of lung cancer after smoking. Legislation introduced in 2019 requires employers in high radon areas to test their workplaces and reduce the level of radon to protect employees, if above the national reference level.



On European Radon Day in November, the EPA held a public awareness campaign advising householders, affected by high levels of radon, on how to take urgent action to reduce their exposure and protect themselves and their families.

Air quality and radon in our living and working environments pose a significant threat to human health. Implementing the transport options outlined in the Government's Climate Action Plan and a move to cleaner ways of heating our homes will address outdoor and indoor air quality. Further roll-out of the National Radon Control Strategy will also ensure that premature deaths can be avoided.

Waste

Waste and its management can have a significant impact on our environment. It is a challenge that has been increasing in recent years and requires co-ordinated action to shift to a more sustainable society.

The EPA leads on the National Waste Prevention Programme which supports enterprises, households and the public sector to prevent waste and drive the circular economy in Ireland.

In July 2019, the EPA published information about waste packaging management. The figures indicate that the generation of waste packaging remained high. While recycling rates were high for some waste streams, including glass and wood, recycling levels have levelled off over the last number of years. The figures show that further measures will be needed to ensure that packaging recycling levels don't stagnate.

Of particular concern is the level of plastic packaging in use and the fact that recycling rates appear to have plateaued in recent years, at around 34 per cent. EPA data indicates that there are challenges ahead in meeting future EU targets and the ambition of the EU Plastics strategy. Preventing this waste in the first place will be an important component of Ireland's response if we are to achieve our goals.

In August, the EPA published environmental data indicating the positive trend in sending hazardous waste for recovery rather than disposal.

Promoting the circular economy, reducing the amount of waste and ensuring better levels of recycling can deliver real impact.



Water

Ireland has committed to protect and improve the quality of our aquatic environment – rivers, lakes, groundwaters, estuaries and coastal waters. However, in a report published in December, the EPA found that the quality of our aquatic environment is declining after a period of relative stability and improvement. The EPA finding that we are continuing to see a loss of the pristine ('best of the best') river water bodies is stark. There are now just 20 pristine river sites, down from over 500 sites in the late 1980s.

EPA analysis also shows that when corrective action is taken we can address the pressures to water quality. As such, the science and techniques are available to restore damaged waterways, but prevention of further damage must be a priority.

In May, the EPA reported on the quality of bathing water for 2018 welcoming a small improvement on previous years – 94% of identified bathing waters met at least the minimum EU standards with over 100 beaches classified as excellent.

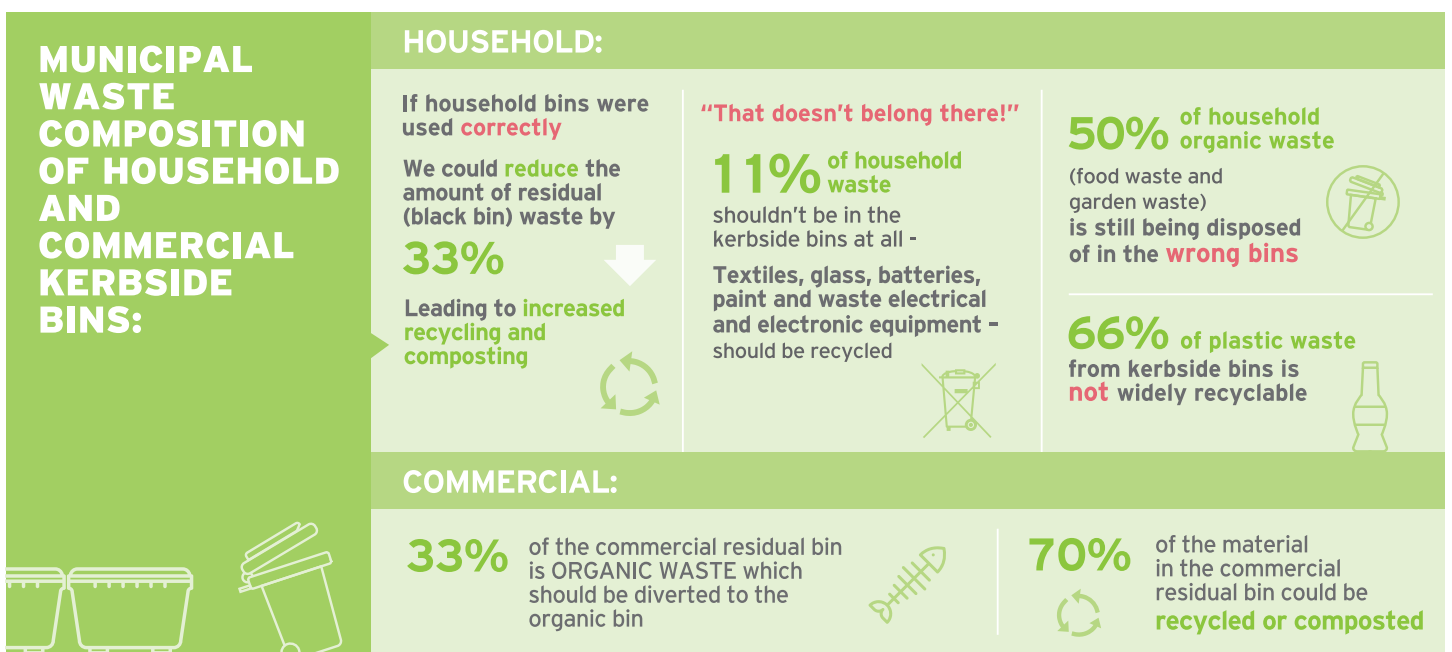
Some areas of the country continue to see the release of raw or inadequately treated sewage into the environment, posing a risk to public health. In November 2019, the EPA reported on waste water treatment in 2018, finding that sewage in 36 towns and villages was released into the environment every day without treatment.

Furthermore, faulty on-site systems in households, such as septic tanks, continued to pose a threat to health from contamination of private wells and water quality in local rivers. In July, an EPA review of over 2,000 inspections by local authorities found many systems inspected failed because they were not built or maintained properly.

The underlying problem is a lack of adequate treatment infrastructure. Investment in treatment systems at a national scale will resolve this legacy issue along with improved maintenance of such systems. An anticipated expansion of the grant scheme to fix problems in household treatment systems may help to address issues in the coming years.

In September, the EPA published a report on the quality of drinking water in public supplies for 2018 and found that although compliance was high the incidence of Cryptosporidium detections had increased. The Boil Water Notice relating to the Leixlip water treatment plant issued in November 2019, which affected over half a million consumers, highlighted an ageing system vulnerable to shocks with the potential to harm people's health. To protect public health, water treatment plants must be made resilient and properly and effectively operated. Those plants without appropriate treatment for Cryptosporidium need to be prioritised for investment.

In general, Ireland enjoys strong compliance with the quality requirements in public water supplies. However, where issues have arisen the EPA has taken action and continues to put public health as the priority at all times.



Licensing and Enforcement

A primary function of the EPA is environmental regulation including licensing facility expansions and greenfield investment activities across a range of industries including waste, pharmaceutical and the power sector. In carrying out this role, the EPA ensures that industrial activities must meet certain standards and are closely regulated based on the risk they pose to the environment. Facilitated by an improved online licensing system, the number of licensing decisions continued to increase rising to 132 decisions in 2019 compared to 94 the previous year.

The EPA continues to regulate for a circular economy through by-product and end-of-waste notifications. In 2019, new guidance related to soil and stone by-product was published following public consultation.

At the end of March, the EPA transitioned radiation licensees to a new risk-based form of authorisation, facilitating more effective regulation of sectors that pose the highest risks.

In July, the EPA reported overall good levels of compliance by industrial and waste licensees. In addition, complaints about licensee activities reduced to 685 compared with 897 the previous year. Over half of the complaints received related to odour, with about a quarter related to noise and over one third of all complaints related to just three sites.

Licensed industrial and waste facilities which consistently fail to meet environmental standards are targeted by the EPA and identified as National Priority Sites for Enforcement. 2019 saw the number of priority sites reduce to 11.



A recent review by the EPA of local authority enforcement shows overall good performance in undertaking their environmental enforcement functions. However, there are areas where improvements are needed. In particular, more focus is needed on the enforcement of waste segregation in households and businesses, along with an increase in farm and air quality inspections.

In December, the EPA issued guidance to assist facilities comply with financial provision requirements to cover the environmental liabilities associated with potential incidents and acknowledged that over the past five years €700 million of financial provision had been secured.

Overall, the EPA has led the implementation of a strong enforcement system that clearly identifies the polluters that pose the biggest risk. Resources are allocated on this basis and it allows for an efficient and transparent system. Public and stakeholder engagement continues to be an important part of this work and the role of the public in assisting with information and observation is recognised and encouraged.

JANUARY



Research funding of €12.2 million for low carbon, sustainable and healthy future

EPA partners with University College Dublin for 'The Story of your Stuff 2019' competition

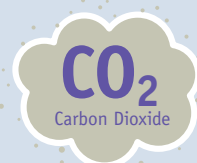


FEBRUARY

MARCH



Transition to graded authorisation for radiation licensees



Ireland's EU Emissions Trading Scheme – emissions drop by 8.2%

APRIL

MAY

Ireland's Transboundary Gas Emissions, 1990–2030 – ammonia emissions increased by 2% in 2017

Public Climate change lecture - climate leadership - as part of National Dialogue on Climate Action

EPA National Water Event - discussing changes in Ireland's water policy and practices



Circular Economy

The EPA-led National Waste Prevention Programme, a Government of Ireland initiative, supports national-level, strategic programmes to prevent waste and drive the circular economy in Ireland. In January, the EPA announced a three-year strategic partnership with The Rediscovery Centre to promote, through education and demonstration, the 'rediscovery' of waste materials through reuse, redesign and repair of clothes, paint, furniture and bicycles.

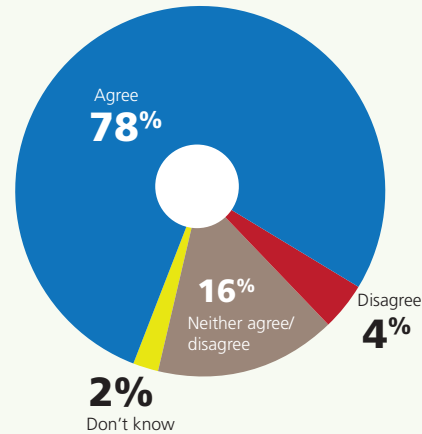
In April, a €600,000 funding opportunity was launched by the EPA for innovators to develop and demonstrate business-ready solutions in areas of national importance such as food waste prevention, construction & demolition waste and plastics.



The EPA led a national campaign on food waste in June, followed by an EPA-hosted forum which brought together business and policy leaders from across the food supply chain. In addition, an educational resource pack was issued to support over 20,000 Junior Certificate students to learn about sustainable living through the Home Economics curriculum.

Results of a recent opinion poll undertaken by the EPA showed that 78% of the public believe they have personally made changes or taken steps to help the environment. Up to 87% are willing to recycle or re-use more and 85% are prepared to reduce food waste. However, only 23% are willing to pay environmental charges or taxes.

Public Opinion: I've made changes or taken steps personally to help the environment



Survey carried out by Red C on behalf of the EPA, January 2020. Base All Adults 18+; n=1,019

There are very real economic and societal benefits to be gained from a shift toward a circular economy and the reduction of waste. This must continue to be a national priority and must be informed by evidence and data that can identify and address problems and create viable solutions.

JUNE

Stop Food Waste campaign – Ireland wastes over one million tonnes of food per year

JULY

Urban Environmental Indicators: Nitrogen dioxide levels in Dublin may be over the EU limit in places

SEPTEMBER

Environment Ireland Conference, Dublin with over 300 delegates attending

Air Quality in Ireland in 2018 – above WHO air quality guideline values at a number of sites

AUGUST

EPA publishes data from Pollutant Release and Transfer Register

JUNE

Citizen engagement

We all have a responsibility to help protect our environment by producing evidence, reporting problems and building sustainable solutions. The problems Ireland face can only be addressed if citizens are engaged and supportive. The EPA has placed a high value and a sense of urgency on this engagement to foster a greater understanding, a genuine sense of ownership and an optimism for the future.



Tomi Ayibiowu, Aldiana Hoxha, Shurooq Azam, and Kar Cong Leong, Hansfield Educate Together Secondary School, Dublin 15: 'The Story of Toothbrushes'

The EPA has continued to play an important role in raising levels of awareness and supporting initiatives that increase citizen engagement with environmental issues. The EPA's Story of Your Stuff competition 2019 asked students to submit stories about the life cycle of an everyday object with an underlying theme of sustainability and awareness – the winning entry told the story of toothbrushes.

During 2019, the EPA worked in partnership with several organisations on a variety of citizen science projects supporting the priorities of clean water and air and sustainable behaviour. The GLOBE citizen science programme continued in partnership with An Taisce. The CleanAir@School programme – a collaboration between the Network of European Environment Agencies and the European Environment Agency – investigated

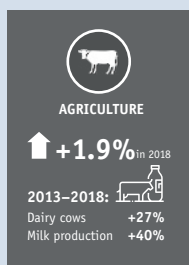
the measurement and effects of nitrogen dioxide near schools. In addition, other programmes included: The Dragonfly Ireland 2019-2024 survey; Explore Your Shore; Seashore Spotter; The Big Beach Biodiversity Survey and Lake Monitoring with Anglers in the Border Region.

The national Dialogue on Climate Action led wide-ranging advocacy and outreach work in 2019 as a means of putting in place a system of community engagement to build public support for climate action. In particular, events organised in collaboration with the Local Authority Climate Action Regional Offices brought together a wide range of stakeholders including local businesses, community and environmental groups and universities.



Blue Emperor Dragonfly

The reaction to projects throughout 2019 shows that there is a strong desire on the part of citizens to engage with their environment and to assist those tasked with protecting it. This must be built upon, to deliver commitments and embrace necessary changes.



Ireland exceeds ghg emissions budget by 5 million tonnes and moves further from climate commitments

Climate change lecture – Facing up to Climate Change: where next for Climate Science - as part of National Dialogue on Climate Action and co-convened with Met Éireann

EPA National Air Event. A forum for Local Authorities, Public Bodies, Researchers and others to share information

OCTOBER

NOVEMBER



National radon awareness day: Too many homeowners are putting their health at risk by not carrying out vital remediation work

EPA co-hosted with the Irish Centre for European Law an environmental law conference exploring the role of law and enforcement in shaping an approach to environmental protection



Environment & Health Conference. Hosted by the EPA; HSE & ESRI

DECEMBER



Water Quality in Ireland 2013-2018 - our aquatic environment is getting worse after a period of relative stability and improvement



www.epa.ie

Headquarters

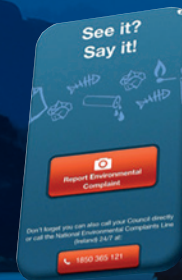
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View organisation structure at: www.epa.ie/about/org/



National Environmental Complaints:
T: 1850 365121
App: See it? Say it?

