

Cleaner Neighbourhoods Report 2020/21



KEEP
NORTHERN
IRELAND
BEAUTIFUL



**CLEANER
NEIGHBOURHOODS**

Summary

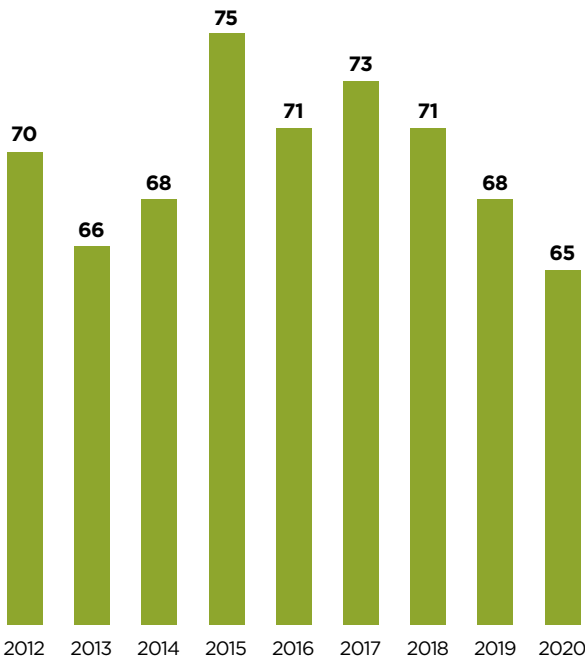
This report details the findings of the 2020 Northern Ireland Litter Survey which was undertaken by Keep Northern Ireland Beautiful between June and August 2020.

Keep Northern Ireland Beautiful's trained assessors surveyed the local environmental quality of 990 individual transects (streets, roads and recreational spaces) across the 11 council areas. Approximately 49.5km (30.8 miles) were surveyed.

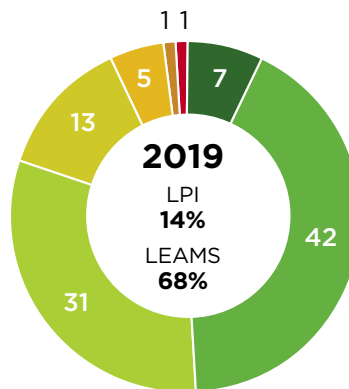
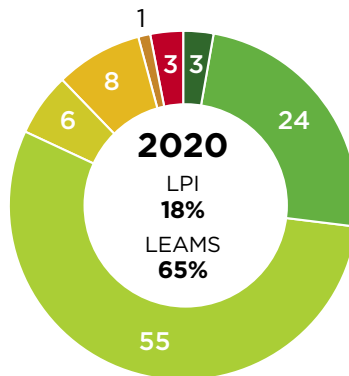
Findings & insights

- **18% of transects** surveyed in 2020 failed to reach the acceptable standard of cleanliness (Grade A to B). This is a 4% increase on the 2019 results.
- **The LEAMS score**, which reflects the average score out of 100 of all transects surveyed, dropped to the lowest rate (65) since the survey began in 2012. This continues a worrying trend of decline noted each year since 2017. This trend could also be linked to the decrease in cleansing spend from year to year with a 29% decrease in spend from 2018 – 2020.
- **Litter and dog fouling** are the primary causes for increased failure rates and declining LEAMS scores. Only 1% of transects fail to meet the acceptable standard of cleanliness due to excessive detritus, staining, flyposting or graffiti.
- **The percentage of transects with dog fouling** present increased significantly from 6% (2019) to 13% in 2020. Nearly a quarter (23%) of all recreational areas surveyed had dog fouling present. 16% of all high obstruction housing transects surveyed had at least one dog foul present.
- **Rural roads and industrial shed and retail areas**, are disproportionately affected by litter when compared to residential, recreational and primary retail areas. 48% of rural roads and 37% of industrial shed and retail transects surveyed, failed to

LEAMS



LEAMS is an alternative method of measuring litter and other indicators which is used in both Scotland and Wales. Unlike the pass/ fail 'Performance Indicator' used in Northern Ireland, LEAMS scores are generated by assigning a value to each grade (A=3 B=2 C=1 D=0), and then calculating the average value of all the grades assigned. This average is presented as a percentage of the total available points for the transects surveyed. It differs from the Performance indicator in that LEAMS score takes account of how clean or littered a transect is, rather than just whether it is a pass or fail. Scores closer to 100 indicate better performance. It is easier to set a target under the LEAMS system; 66 is the point at which performance is considered acceptable, as it equates with an average grade B.



The rings above show the percentage of transects surveyed that were allocated each of the seven grades available (see key).

Totals may not equal 100 due to the rounding up or down of figures to make whole numbers.

KEY

Grade A (pass)

Completely free of indicator (litter, detritus, graffiti etc.)

Grade B+ (pass)

Predominantly free of indicator apart from some small items

Grade B (pass)

Many small indicator items or one larger item

Grade B- (fail)

A few larger indicator items

Grade C (fail)

Many larger indicator items

Grade C- (fail)

Accumulations of larger indicator items

Grade D (fail)

Transect is heavily affected by indicator, both widespread and accumulated

reach the acceptable standard of cleanliness for litter, compared to just 2% of primary retail transects which failed to meet the acceptable standard.

■ **Only 3% of Low Obstruction Residential** (where more than 50% of cars can pull off the road into driveways or similar) transects failed to meet the accepted standards of cleanliness in 2020. High Obstruction Residential (where more cars park on street) transects had a 20% failure rate (5% worse than 2019). It is clear that obstructions to mechanical sweepers, caused by parked vehicles, have a significant impact of the ability of cleansing regimes to tackle litter and detritus in these areas.

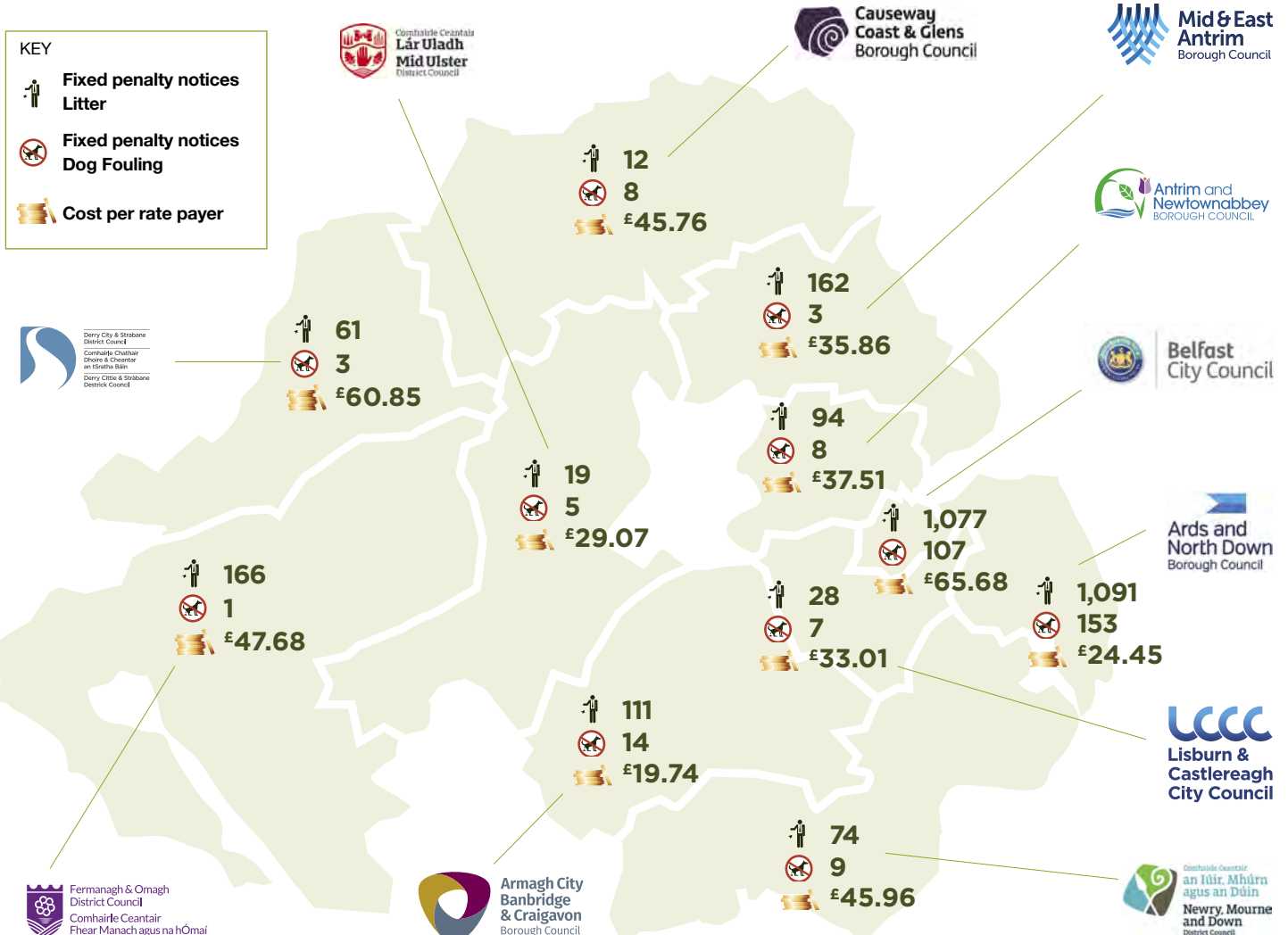
■ **During the survey 3% of transects** were reported to have PPE (gloves and masks) present. Outside of the survey parameters additional discarded PPE equipment was observed by KNIB assessors. It is important that the public recognise that using Personal Protective Equipment comes with the responsibility of not just using it properly but also disposing of it in a way that doesn't harm the environment and other members of the public. These items once done with, need to be put in the appropriate bin.

Cleansing spend and the use of fixed penalty notices

The total spend on street cleaning across all of Northern Ireland in 2018/19 was £31,400,652.48. With an estimated population of 1,864,570 people in 736,470 Households in Northern Ireland¹ this means that on average every rate payer was charged £42.64 for cleaning the streets, even if they are not personally a litterer. Please note that these figures relate to 2018/19, and are therefore one year behind the figures in the rest of this report. Figures are only made available in autumn of the following year.

¹ NISRA Population and Household Projections for Northern Ireland (for 2019), 2016-2041 (HHP16_NI).

AVERAGE FOR ALL OF NI:



Cigarette litter

Cigarette related litter is the most commonly observed type of litter in Northern Ireland with cigarette butts being recorded as the most abundant item in our Litter Composition Analysis report.²

In recent decades it has been estimated that more than 5 trillion filtered cigarettes are produced annually on a global scale.³ In 2020 69% of all transects surveyed were recorded as having at least one cigarette related item present within the survey area. Over 90% of all primary retail, secondary retail and high obstruction residential transects surveyed were recorded as having cigarette related litter present.

Not only are cigarette butts considered 'unsightly' by the majority of the population, they also contain a number of chemicals and plastics, which have harmful impacts on the environment as they leach when exposed to the elements. Cigarette filters are made from cellulose acetate, a type of plastic that can take up to 13 years to break down.⁴ Discarded butts also routinely get into our waterways, and eventually our oceans. Proposals to decrease cigarette butt pollution have been largely ineffective, with cigarette butts consistently being the single most observed item in beach clean-ups and litter surveys. In fact, they are the greatest single source of marine litter worldwide, ranking even higher than plastic bags and straws, and have been commonly found in the stomachs of fish, birds, whales and other marine creatures.⁵

Littered cigarette butts can be difficult to tackle as they break down when exposed to the elements and become harder to remove from the environment. Educating people on the impact littered butts are having on their environment will be key to addressing this problem. Enabling and encouraging responsible disposal of cigarette butts will also play a key role. The use of nudge intervention and well designed and placed refuse containers, such as Cigarette Ballot Bins, should be trialled to help tackle this issue.

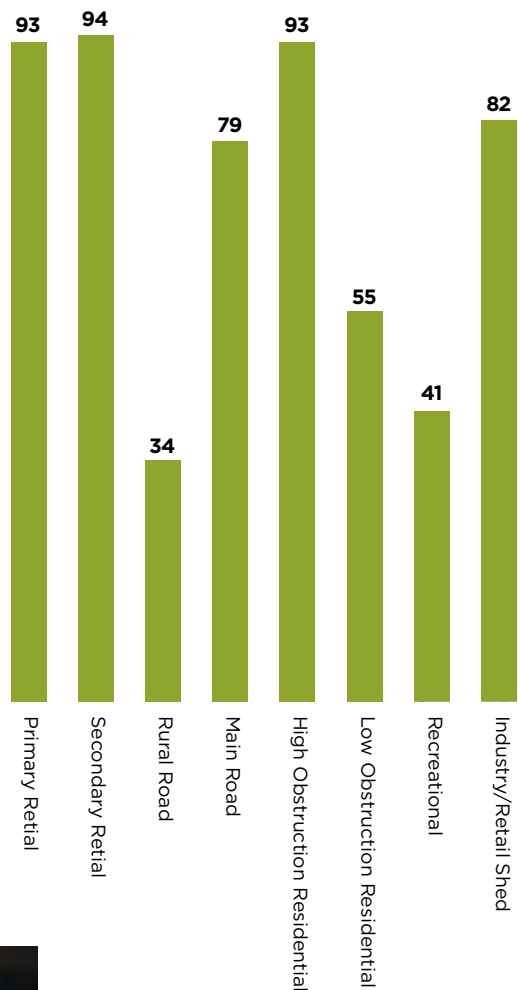
What is a Ballot Bin?

A Ballot Bin is a customisable ashtray, targeted at reducing cigarette butt litter. Each Ballot Bin displays a question and two answers. Smokers vote by putting their cigarette butt in the slots underneath their preferred answer. The litter stacks up behind the clear glass front in two columns, showing which answer is more popular. The questions can be easily changed by the Ballot Bin owner. They can be funny, topical, provocative – whatever works for the target audience. Smokers find the Ballot Bins much more engaging than alternative ashtrays and are therefore more likely to use them.



The presence of cigarette litter per land-use type

Percentage of transects with cigarette related litter present, for each of the land-use types assessed during the survey.



² <https://keepnorthernirelandbeautiful.etinu.net/keepnorthernirelandbeautiful/documents/008117.pdf>

³ Torkashvand, J., Godini, K., Jafari, A. J., Esrafil, A., & Farzadkia, M. (2021). Assessment of littered cigarette butt in urban environment, using of new cigarette butt pollution index (CBPI). *Science of the Total Environment*, 769. <https://doi.org/10.1016/j.scitotenv.2020.144864>

⁴ Joly, & Coulis. (2018). Comparison of cellulose vs. plastic cigarette filter decomposition under distinct disposal environments. *Waste Management*, 72, 349-353.

⁵ <https://www.nbcnews.com/news/us-news/plastic-straw-ban-cigarette-butts-are-single-greatest-source-ocean-n903661>

Dog fouling

1 in 5 transects that failed to meet an acceptable standard for litter do so because of high levels of dog fouling. In 2020 dog fouling was observed on 13% of all surveyed transects, which is just over double the amount observed in 2019.

A total of 216 incidents of dog fouling (whole, bagged and smeared) were recorded. Although it fluctuates from year to year, since 2012, dog fouling has never been observed as much as it was in 2020 during the cleaner neighbourhood surveys.

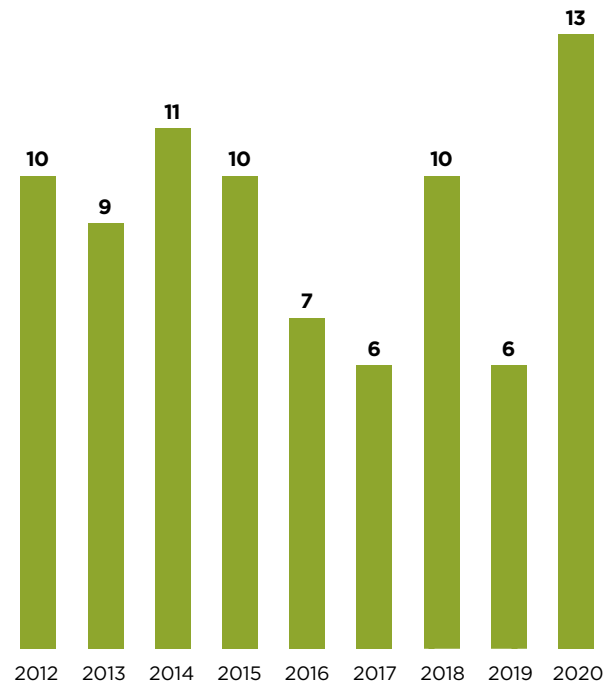
Each year the same land use types are considered as ‘hotspots’ for dog fouling. 23% of recreational transects and 16% of high obstruction residential transects had at least one dog foul present during the survey. The data on dog fouling continues to show clustering behaviour; while outside of residential and recreation transects dog fouling has been lower, the transects that have instances of dog fouling tend to be heavily affected, with an average of two deposits observed on these transects. The highest number recorded was eight separate deposits in one recreational area. This supports the idea that a failure to clean up dog fouling is influenced by ‘signalling’; the presence of dog fouling indicates to other owners that dog fouling is accepted in that area, and they do not need to clear up after their pet.

Keep Northern Ireland Beautiful can offer bespoke surveys for councils to identify and assess dog fouling hotspots. These surveys can be paired with ‘nudge’ behaviour change interventions to trial new approaches to tackling this persisting problem.

Keep Northern Ireland Beautiful offers these and other posters as well as offering support and advice on their optimum use. <https://www.keepnorthernirelandbeautiful.org/cgi-bin/resources?instancelD=1>

The presence of dog fouling per land-use type

Percentage of transects with dog fouling present, for each of the land-use types assessed during the survey.



Plastic, a protector or polluter?

At the beginning of 2020 Northern Ireland joined the list of countries impacted by the global pandemic brought about by the Coronavirus disease (COVID 19; SARS-CoV-2). The impacts of the disease and the subsequent public health response has brought about significant change to our normal way of living, as well as a change in attitudes to how we operate in society. In particular, the pandemic has reemphasized the indispensable role of plastic in our daily life.⁶



Personal protective equipment (PPE)

With the imposition of nationwide lockdown and other guidelines there has been an increase in the necessity for plastic based PPE including aprons, gowns, face shields, surgical masks and other PPEs for frontline health workers as well as face masks and gloves which have been used by all members of the public.⁷ In the UK as a whole there was an estimated demand in the range between 10 and 16 million PPEs per day despite the current supply of 14 million by the UK government.⁸ For Northern Ireland this was estimated at 1.1 million PPEs per day between March 2020 and January 2021.

Plastic has a great strength to weight ratio and durability that makes it perfect for protective equipment.⁹ The problem arises from the misuse of this equipment, and the irresponsible and negligent attitude towards these resources. Within the survey areas 3% of transects were observed to have PPE present, although more was noted by assessors outside of the survey area. When this was compared to the survey area covered (49.5km) it can be estimated that at any one time there could be 5,272 gloves and 2,000 masks giving a total of 7,272 items on our streets, irrespective of what cleansing regimes are back in place right now. It is important that the public recognise that using Personal Protective Equipment comes with the responsibility of not just using it properly but also disposing of it in a way that doesn't harm the environment and other members of the public. These items once done with, need to be put in the appropriate bin.

E-commerce and takeaway culture

There has been a reliance on take-away food services resulting in an increase in the use of many single use plastics in the form of packaging and cutlery. Littering of such items is part of the reason

the LEAMS score has dipped to an all-time low. During the survey, 17% of transects were observed to have some form of takeaway litter present along them, including packaging, cups, straws and cutlery. The highest occurrence of this litter occurs along rural roads where 41% of transects observed have some form of takeaway litter present. In comparison, only 3% of low density residential housing transects had takeaway litter present. From this we can surmise that a lot of the takeaways are being eaten while in the car and thrown out the window, either along the road or at a carpark.

Fly tipping

Due to the ongoing constraints of COVID-19 a number of cleansing and waste management services have been impacted. In Northern Ireland many household recycling centres were closed during the first lockdown period between March and May. Unfortunately, Keep Northern Ireland Beautiful's assessor noted several incidents of fly tipping during the survey period, and we received numerous anecdotal accounts of increased fly tipping within all council areas. A number of high profile beauty spots in Northern Ireland also suffered from significantly increased levels of litter.



⁶ Parashar, N., & Hait, S. (2021). Plastics in the time of COVID-19 pandemic: Protector or polluter? *Science of the Total Environment*, 759, 144274. <https://doi.org/10.1016/j.scitotenv.2020.144274>

⁷ Kahlert, S., Bening, C.R., 2020. Plastics recycling after the global pandemic: resurgence or regression? *Resour. Conserv. Recycl.* 160, 104948.

⁸ BBC, 2020. COVID-19: How Long Does the Coronavirus Last on Surfaces. British Broadcasting Corporation (BBC) <https://www.bbc.com/future/article/20200317-covid-19-how-long-does-the-coronavirus-last-on-surfaces/> (Accessed 26 February 2020)

⁹ Chen, W.Q., Ciacci, L., Sun, N.N., Yoshioka, T., 2020. Sustainable cycles and management of plastics: a brief review of RCR publications in 2019 and early 2020. *Resour. Conserv. Recycl.* 159. <https://www.bbc.com/future/article/20200317-covid-19-how-long-does-the-coronavirus-last-on-surfaces>

Recommendations for policy makers, individuals and government

These are some of the recommendations that Keep Northern Ireland Beautiful believe are necessary to meaningfully reduce littering, dog fouling and related environmental impacts in Northern Ireland.

Individuals:

1. Be active in tackling pollution

Tackling litter pollution at the source is the best solution and this requires more of a focus on changing mind-sets and helping individuals to be more conscious about our waste. We are using more 'stuff' and throwing it away faster than ever. Refusing and reducing where you can is key. Bring your own reusables such as reusable bottles, cups and food containers, if you forget your reusables, choose products with less packaging and that are recyclable. Challenge both yourself and others to get involved in positive environmental action like clean-up events.

2. Reduce the amount of Single Use Plastics you use

Many foods, products and goods are packaged in Single Use Plastics, which encourage a throwaway society. It is however becoming increasingly easier to swap out these single use items for more sustainable alternatives. Easy examples include not using small plastic bags for picking up fruit and vegetables from supermarkets or avoid buying reusable water bottles and instead invest in a long life refill bottle. For more information, check out the Tackling Plastics Project at <https://www.keepnorthernirelandbeautiful.org/cgi-bin/generic?instanceID=60>

3. Get involved with the local community

All across Northern Ireland community groups are already doing their part to tackle the litter issue in their area. Why not reach out and get involved to support these groups. You could also take the initiative and take action, help clean areas through adopting a local spot (<https://www.liveherelovehere.org/cgi-bin/generic?instanceID=61>) or write to your MLAs and local councillors demanding a need for change.

Government

1. Litter legislation

We need a litter strategy. A joined-up approach is essential to tackle the causes of litter in Northern Ireland. This would need to include education, enforcement, public engagement, working closely together and sharing scarce resources. Litter legislation is directly linked to the Deposit Return Scheme and Extended Producer Responsibility, as well as the Plastics Directive (part of the NI Protocol).

2. Courts must produce coherent guidelines for the treatment of litterers

This needs to include which fines and penalties can be issued during court proceedings. This is to ensure that fair and reasonable penalties are applied consistently to avoid anyone from finding ways around the system to receive a smaller cost than the original fixed penalty notice.

3. Joined-up approach for councils on the enforcement of litter issues

There needs to be a harmonisation across all councils to ensure that best practices on enforcement of litter and dog fouling is followed. These practices need to be made clear for all to follow and rule out any ambiguity for the public regarding the treatment of offenders.

4. Deposit Return Scheme

Deposit return schemes (DRS) would mean that consumers pay an up-front deposit for an item such as a sealed drink at purchase with the deposit redeemed on return of the empty drinks container. This practice would help to incentivise people to not just throw away their items as they would now have a monetary value attached to them.

DRS would also greatly reduce the number of plastic items reaching our seas thus helping Northern Ireland play its part in tackling marine plastic pollution and working towards Good Environmental Status for Descriptor 10 in the Marine Strategy Framework Directive.

Through the Live Here Love Here campaign businesses can be part of a collaborative initiative in tackling litter pollution in Northern Ireland. As we all know, the prevention of litter in the first place is the best way to tackle the problem and will help reduce the clean-up costs that producers will have to pay.

5. Extended Producer Responsibility

Extended Producer Responsibility (EPR) requires producers to cover the costs of waste collection and the clean-up of litter, there is a significant opportunity to save money by preventing littering in the first place. In the interim, prior to the legislation coming into force, producers have the opportunity to collectively use Northern Ireland, as a discrete land area within the UK, to test a credibly resourced litter prevention campaign by raising the scale of investment from the current £500,000 to £4.1 million.

The EU Plastics Directive are retained in UK law, irrespective of the outcome of Brexit. England, Scotland, Wales and Ireland have already made regulations to ban certain items coming into force in 2020 and 2021. Northern Ireland is still to consult on this issue.

Regulations include the introduction of EPR requiring producers to pay for the cost of: – collection, transport and treatment of waste – items discarded in public collection systems – cost of cleaning up these litter items outlined in the directive, discarded in public collection systems, including transport and treatment – education and awareness raising campaigns around the most commonly encountered plastic items.

6. Increasing the ratio of spend on prevention compared to clean up.

Behaviour change through education needs to be a higher priority if we are to seriously tackle the issues of dog fouling and litter. As great as it is for funding to be invested in cleaning up litter this is not the solution as it is only funding us to stand still. There is an opportunity for funding to be reallocated into projects and campaigns that work towards changing the behaviour of individuals as well as corporations.

The Live Here Love Here Campaign is an already established, successful, local, collaborative, litter prevention platform. Through education and empowerment, it builds a sense of civic pride in our local communities. Individual actions and small scale campaigns

can only, at best, achieve incremental improvements and the global crises, including marine plastic pollution, now requires transformational change.

Businesses:

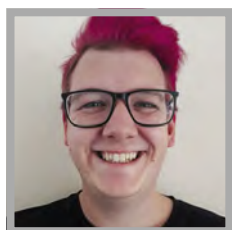
To play their part even before any of this legislation (EPR/DRS) comes into force.

Legislation for a number of SUP bans and targets for reductions on takeaway containers is coming into effect [with wider UK EPR reform still progressing]. KNIB and DAERA are committed to a local solution to an escalating litter problem in Northern Ireland.

Whilst many producers are doing their bit by introducing initiatives, costs to combat litter in NI run to tens of millions of ratepayers' money and responsibility must be shared. Direct engagement from producers is vital. Any proposed solution should have industry input and support. More investment into the Live Here Love Here Campaign, means producers will be directly contributing to the prevention of litter in the first place, creating behavioral change and reducing their associated costs of waste collection and clean-up litter.



Fly tipping on a rural road entrance to a work site.



To discuss how we can work together to tackle littering please contact:

Conor Bush
LOCAL ENVIRONMENT QUALITY OFFICER

conor.bush@keepnorthernirelandbeautiful.org

T 028 9073 6920

www.keepnorthernirelandbeautiful.org



Email enquiries@keepnorthernirelandbeautiful.org Registered Address Bridge House, 2 Paulett Avenue, Belfast BT5 4HD
Registered Charity No XR36767 NI Charity No NIC 102973 Company No NI38848 VAT Reg No 860 2036 57

KEEP
NORTHERN
IRELAND
BEAUTIFUL



CLEANER
NEIGHBOURHOODS