

### TESTIMONY OF MINDY O'BRIEN COORDINATOR OF VOICE OF IRISH CONCERN FOR THE ENVIRONMENT (VOICE)

# BEFORE THE DAIL COMMITTEE ON COMMUNICATIONS, CLIMATE ACTION AND THE ENVIRONMENT $17^{\text{TH}}$ JANUARY 2018

#### Introduction:

Thank you members of the Environmental Committee, as the Coordinator or VOICE and as a representative of the Environmental Pillar, I ask that you fully support and pass the Waste Reduction bill. We believe that this long over-due and common sense piece of legislation would go a long way to reduce the amount of plastic and other materials littering our country-side, waterways, beaches and city streets. A simple stroll across a beach or street reveals that our current system is not working. Plastic bottles, aluminium cans, disposable coffee cups and other extraneous plastic waste foul our beautiful country and destroy the marine environment. Despite the adoption of a three bin system and the work of REPAK, there are still huge leaks in our current waste management system which does not address our on-the-go disposable society. Much of waste generated is made up of single-use plastic packaging and items, including food and drinks containers, plastic cutlery, straws and other plastic packaging which ends up either in our city bins or as litter. This doesn't even address resources that are lost because of improper household and commercial recycling. As the contents of our city and town public bins and litter are rarely sorted to claim recyclable packaging, plastic and glass bottles and aluminium cans, this material goes directly to incineration or landfill, thus losing valuable resources forever either through disposal or by entering and damaging our natural environment. According to the three regional waste plans adopted in 2015, we generate around 58,634 Tonnes of litter and waste from public bins in 2015. This does not account for the amount of rubbish that is leaked into the marine environment.

#### The Waste Reduction Bill

The Waste Reduction bill provides a simple solution to the leakages in our waste system as well as a methodology to prevent the creation of unnecessary waste. I will address each section of the bill:

#### Section 3: Ban on Disposable Non-compostable tableware

This section would ban the sale or free distribution of disposable plastic cups, glasses, plates and other tableware from Jan 2020, except those items that can be composted in an ordinary domestic compost facility.

According to EPA's 2015 packaging waste statistics<sup>1</sup>, Ireland generated 282,148 Tonnes of plastic packaging waste and recycled 95,890 Tonnes for a 34% recycling rates. This closely mirrors the EU rate. According to REPAK, of this 282,148 Tonnes of plastic packaging waste, 39,501 Tonnes were PET drinks bottles. This leaves 242,647 tonnes of plastic packaging created each year. Please refer to the graph below which analyses the composition and recycling rates for plastic packaging in general.

<sup>&</sup>lt;sup>1</sup> http://epa.ie/nationalwastestatistics/packaging/

Plastic	Generated	Recycled	Bottles	Not	Bottles not	Percentage
packaging			Recycled	Recycled	recycled	Recycled
generated and						
recycled in 2015						
Plastic in total	282,148	95,890		186,258		34%
Plastic bottles <sup>2</sup>	39,501	27,535	2.118 bill	11,966	920.5 mill	70%
Other plastic	242,647	68,355		174,292		28%
packaging						

It is very difficult to ascertain how much of this non-recycled plastic packaging represents single-use, on the go packaging and how much is food and other commercial packaging. However, it is certain that much of the plastic litter and composition of public waste bins does derive from single-use disposable items and containers.

A simple ban on the sale of plastic cups, plates, straws and other non-packaging plastic material is consistent with Article 18 of the EU Packaging Waste Directive.<sup>3</sup> France has banned disposable plastic bags, cups and plates entirely and has imposed requirements on disposable cutlery by 2020. 4 Korea has banned the use of disposable plastic plates and bags and other single-use containers/items. In Taiwan, the government imposes "large fines against businesses that give away plastic bags, utensils, and Styrofoam and plastic food containers... Plastic tableware has nearly disappeared from the island, with usage dropping by 90 percent since the restrictions took effect."6

The cities of Santa Monica and San Francisco in the US ban the use of non-recyclable plastic disposable food service containers which includes polystyrene. In Seattle, packaging must be compostable or recyclable. Such compostable containers must be compostable in Seattle's system. In Washington, DC, Styrofoam was banned in 2014.

However, a ban on plastic packaging would most likely violate Article 18 of the Packaging Directive which prevents Member States from impeding "the placing on the market of their territory of packaging which satisfies the provisions of this Directive." Plastic packaging, such as PET drinks bottles, plastic food containers and disposable coffee and other drinks cups when sold with the beverage, would best be addressed through the imposition of a levy.

### **International Experiences**

Packaging levies exist in a significant number of other EU Member States. In Denmark and the Netherlands, the introduction of a packaging levy has collected significant funds and halted the increase in consumption of plastic packaging, a particularly environmentally damaging form of packaging.

In a number of EU Member States and applicant countries, packaging levies are only applied as a fine when recycling targets are not met. The levy is paid on the difference between the prescribed recycling targets for a particular material and the rate achieved. Membership of a Green Dot organisation usually exempts members from the packaging levy.

<sup>2</sup> REPAK statistic

<sup>&</sup>lt;sup>3</sup> EU Packaging Waste Directive 94/62/EC; http://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX:01994L0062-20150526

http://edition.cnn.com/2016/09/19/europe/france-bans-plastic-cups-plates/

<sup>&</sup>lt;sup>5</sup> http://www.apec-vc.or.kr/?p\_name=newsroom&gotopage=434&query=view&unique\_num=25

<sup>6</sup> http://www.csmonitor.com/2004/0615/p07s02-woap.html

The experience of a number of European countries demonstrates an inherent disadvantage with volume-based levies. For example, in Finland it was noted that a volume-based levy had not incentivised producers to minimise the amount of material used in a container e.g. to use thinwalled containers rather than thick-walled containers. Nor had the levy incentivise producers to use materials with a lower environmental impact. <sup>7</sup>

In 2008, the Netherlands introduced a carbon-based packaging tax, looking at a life cycle assessment based on greenhouse gas emissions. <sup>8</sup> However, this approach did not address other environmental impacts such as littering, resource use and marine plastics. They created 13 tax levels for weight-based materials and 6 levels for volume-based materials.

The Danish government has imposed a 19.20 DKK/kg levy on all wholesalers of disposable tableware. In 2000 they have also imposed a tax based on a product's PVC or phthalate content at a rate of 2 DKK per kg PVC and 7 DKK per kg phthalates. Lastly, they have imposed a tax on tetrachloromethylene, trichloroethylene and dichloromethane at a rate of 2 DKK per kg. We are not judging the adequacy of the amount of tax imposed, but rather that such tax has been adopted by other jurisdictions. If Ireland were to impose such a levy, the amount imposed would have to be further analysed.

Belgium adopted a 'picnic' tax which imposed taxes on wholesalers, who were liable to pay tax on various single-use items. Tax on disposable plastic bags was set at €3.00 per kg, €2.70 per kg for plastic food wrapping, €4.50 per kg for aluminium foil and trays and €3.60 per kg for disposable kitchen utensils.<sup>10</sup>

#### Administration

Many researchers have identified Ireland's plastic bag tax as one of the most successful economic incentives to prevent the generation of waste, and therefore, many countries have adopted similar initiatives. Here, we charge tax on consumers at Point of Sale and the bookkeeping and reporting is fairly easy as it is integrated with retailer VAT returns. Mirroring the success associated with the Irish Plastic Bag Tax, we assert that any single-use packaging levy should be imposed at the point of sale to consumers. This makes the levy visible and allows consumers to make the choice of bringing their own containers or pressure retailers to offer compostable containers. The levy should be established on a 'per container' or 'per single-use item' basis and administered like the plastic bag tax. It has been noted that both Denmark and South Africa charged retailers the tax on plastic bags, which sometimes was not passed on to the consumer and therefore, did not affect behavioural change.

According to Dominic Hogg's Economic Instruments report for Belgium, the following approach is the most effective:

<sup>&</sup>lt;sup>7</sup> https://www.idgebim.be "A Comparative Study on Economic Instruments Promoting Waste Prevention. Final Report to Bruxelles Environnement", Dominic Hogg et. al

<sup>&</sup>lt;sup>8</sup> https://www.idgebim.be "A Comparative Study on Economic Instruments Promoting Waste Prevention. Final Report to Bruxelles Environnement", Dominic Hogg et. al

<sup>&</sup>lt;sup>9</sup> The Use of Economic Instruments in Nordic and Baltic Environmental Policy 2001-2005, Stefan Speck, Mikael Skou Anderen, et. al., National Environmental Research Institute, Denmark

<sup>&</sup>lt;sup>10</sup> https://www.idgebim.be "A Comparative Study on Economic Instruments Promoting Waste Prevention. Final Report to Bruxelles Environnement", Dominic Hogg et. Al This statute is no longer in effect.

<sup>11</sup> https://www.envecon.eu/content/files/Waste\_and\_Plastic\_Bag\_RIAS\_-\_2008.pdf

- Apply taxes to items where alternatives are clearly available (this is likely to ensure a reasonable response to the tax);
- Continual review of the tax to ensure that its effectiveness is not being eroded over time (e.g. through inflation);
- Ensure the tax is designed with sufficient inbuilt flexibility to adapt to changing economic conditions;
- Prior to introducing the tax, develop an effective communication campaign to advertise the rationale behind the tax. In this respect, there should be a clear rationale for the tax; and
- Albeit that this is desirable rather than necessary, it is helpful to be introducing such
  measures against the backdrop of a DVR [pay by weight] charging for household
  waste. This can help strengthen the response to price changes occasioned by the
  tax.<sup>12</sup>

### Benefits of a Packaging Levy in Ireland

The "polluter pays" principle, or in this case the principle of Extended Producer Responsibility (EPR), acknowledges that manufacturers have the greatest level of control over the design of packaging and therefore the greatest ability to alter its environmental impact. Producers place unrecyclable and low cost plastic packaging on the market with no consequences for the life cycle costs (including the disposal and environmental impacts). These externalities must be addressed and the costs borne by the manufacturers placing the material on the market. While many companies placing packaging on the market are members of REPAK and pay fees according to the amount of packaging introduced, there is no differentiation between the type of packaging and the fees charged. A company using unrecyclable plastic resin is treated the same as the company who uses recyclable or compostable packaging. There is no incentive on the participating REPAK member to use more sustainable packaging. Additionally, while theoretically, fees to REPAK should encourage industry to reduce packaging or be more responsible for what they place on the market, it does nothing to affect behavioural change. A levy is intended to influence and change individual behaviour to prevent the creation of waste and reduce the amount of single-use items. A levy, like the plastic bag tax, would make consumers think about the packaging and single-use items they use and hopefully encourage them to make choices that would reduce the use of such items. For example, we estimate conservatively that we use 200 million disposable coffee cups per annum in Ireland. To address this, we are supporting the Conscious Cup Campaign that urges consumers to bring their own coffee cup and we are signing up cafes and coffee shops to offer some sort of incentive to those bringing their own. On the flip side of the same coin, Minister Naughten has announced his intention to impose a latte levy on all disposable coffee cups. These two initiatives together would encourage consumers to reduce the amount of single-use cups, which litter our streets and beaches, and which are not recyclable. It is this type of measure that will change human behaviour and coud be replicated on more single-use items.

Currently, the EU estimates (in its Strategy on Plastics in a Circular Economy<sup>13</sup>) that 90% of plastics placed on the market are derived from virgin fossil fuel feedstock. This has resulted in 400 M tonnes of Greenhouse Gases in 2012. It is estimated that the manufacture of virgin plastic will rise to 20% of the global oil consumption by 2050 and create 15% of the global annual carbon emissions.<sup>14</sup> Most

<sup>&</sup>lt;sup>12</sup> https//www.idgebim.be "A Comparative Study on Economic Instruments Promoting Waste Prevention. Final Report to Bruxelles Environnement", Dominic Hogg et. al

<sup>&</sup>lt;sup>13</sup> http://www.europarl.europa.eu/legislative-train/theme-new-boost-for-jobs-growth-and-investment/file-strategy-on-plastics-in-the-circular-economy

<sup>&</sup>lt;sup>14</sup> http://www.europarl.europa.eu/legislative-train/theme-new-boost-for-jobs-growth-and-investment/file-strategy-on-plastics-in-the-circular-economy

manufacturers use virgin plastic resin because it is cheaper and they don't have to pay for the external costs. A levy on plastic packaging will address these externalities and have the economic impact of levelling the field for other more sustainable packaging choices. The current perception is that compostable packaging is more expensive than cheaper plastic resin. Such a levy will address this imbalance.

# Section 4: Provide for a deposit and return scheme for sealed containers in which beverages are sold.

Ireland once had a deposit/refund scheme on glass bottles and it was very popular and effective in reusing glass bottles over and over again. Once Ireland, like so many countries, started using one-way, single use drinks containers, this deposit/refund scheme petered out. This was done gradually and was lead by the drinks producers. As a result, we now generate over 3 billion single use plastic bottles, over 582 million aluminium cans and 718 million glass bottles (cannot determine how many drinks bottles vs. other glass containers). See Repak graph below for the year 2015:

Material	Produced (tonnes)	Recycled (tonnes)	Number of containers recycled	Not Recycled (tonnes)	Number of containers not recycled	Percentage Recycled
Glass Packaging	143,598	125,772	629 mill	17,826	89 mill	88%
Plastic Bottles	39,501	27,535	2.12 bill	11,966	920 mill	70%
Aluminium Cans	8,733	4,778	318.5 mill	3,955	263.7 mill	55%

A deposit/refund scheme has great support from the public as in 2013, an opinion poll carried out by Coastwatch Ireland of 1,426 adults and children over 10 found that 89% were positive about such a proposal, with just 6% against and 5% giving it "conditional approval". The over-40s said they had "fond memories" of the good old days when there was such a scheme. Coastwatch's 2016 survey showed that the "top 5 marine litter items which were reported in over 50% of our shores in 2016 were: plastic drinks bottles (83.6% of shores) drinks cans (72.8%) Rope and string (68.4 %), Other Plastic (59.6%) and bottle lids (50.9%)."

According to Deutschland Umvelthilfe, a German environmental charity, beverage packaging normally makes up to 40-50% volumetrically of litter and public bin waste.<sup>17</sup> Using this calculation, we estimate that over 23,000 tonnes of our litter and public bin waste is made up of drinks containers.<sup>18</sup> We have no idea how many plastic bottles enter into the marine environment from Ireland, but according to Sky Ocean Rescue, 4.8-12.7 million tonnes of plastic enter the oceans each year.<sup>19</sup> They go on to say that plastic bottles are the 3<sup>rd</sup> largest component of this marine litter, after

 $^{17}\ www.sustainabilityexchange.ac.uk/files/hygtb\_eauc\_prez\_nov\_2016.pdf$ 

 $<sup>^{15}</sup>$  REPAK statistics with material tonnages. Plastic bottles are calculated to weigh 13 g, aluminium cans are calculated to weigh 15 g and glass bottles are calculated to weigh 200 g.

<sup>16</sup> www.coastwatch.org

<sup>&</sup>lt;sup>18</sup> The amount of litter and waste from public bins is calculated by the three regional waste plans to be 58,634 Tonnes.

 $<sup>^{19}\</sup> https://news.sky.com/story/head-of-sky-news-john-ryley-why-were-launching-sky-ocean-rescue-and-getting-rid-of-disposable-plastic-in-our-canteens-10739990$ 

cigarette butts and food packaging. As Ireland is an island nation, there are many entry points for plastic bottles and other plastic packaging into the Atlantic Ocean and Irish Sea.

Ten US States, many parts of Canada, Australia, South Korea and eleven EU countries have adopted a version of a deposit/refund scheme (DRS) for drinks containers with great success, achieving collection rates of up to 98%. The State of Michigan, which has had a DRS since the 1970s, has the highest deposit rate of \$.10 per container and the highest recycling rate of up to 98%. Finland, which has a DRS, recycles 92% of its plastic bottles.

An Uplift petition, which has garnered nearly 5,000 signatures in support of a DRS in Ireland, will be presented to the committee on Wednesday and around 30 Tidy Town groups, who are at the coalface of litter (including hundreds of thousands glass and plastic bottles and aluminium cans collected in our communities each year), have signed up to support the Waste Reduction bill.

While we enjoy a fairly high recycling rate for glass, we have a collection rate of 70% for plastic bottles and a paltry 55% for aluminium cans, which are 100% recyclable. 20 The UK is considering a country-wide DRS and the Department of Environment, Food and Rural Affairs (DEFRA) has been taking public comments. Environmental Secretary Michael Gove has been horrified by the amount of plastic in the marine environment and has been affected by the Blue Planet II series by Sir David Attenborough.<sup>21</sup>

The adoption of a container DRS would:

- Result in higher recycling rates
- Capture valuable resources
- Stop beverage container littering
- Change human behaviour
- Save money on litter clean-up
- Create new green jobs
- Embrace the circular economy<sup>22</sup>

Recycling firms such as Shabra, Ltd. and Wellman International, which recycles 2.66 billion PET bottles/year, saves 892,967 barrels of oil and 198 M kg/CO2 released, say that the quality of the feedstock is essential. Collecting PET bottles separately increases the quality of the material and reduces significantly the contamination level, thus making it more valuable and easy to recycle. The current industrial practice is to only use virgin plastic for drink and food containers as it is believed that, due to health and safety concerns, recycled plastic feedstock is not appropriate. However, companies are now implementing new technology to use increasingly recycled PET for drinks and food containers. Interestingly, companies investigating and experimenting in the use of recycled plastic feedstock for such containers are buying this recycled plastic from recyclers that receive their plastic bottles through DRS because of the higher quality.

With the new incinerator on-line at Poolbeg and with the Duleek incinerator and numerous cement kilns, there is more demand for plastic to burn, rather than for recycling, going against the waste hierarchy and the EU's priority to foster a circular economy. The new EU Circular Economy Package calls for 65% recycling target and will release its Plastics Strategy later this year. The adoption of this bill will assist Ireland in its path to reach and exceed the EU recycling target and will put Ireland out in front as a leader in waste prevention and management in Europe.

<sup>&</sup>lt;sup>20</sup> REPAK statistics

 $<sup>^{21}\,</sup>https://www.gov.uk/government/news/views-sought-on-reward-and-return-schemes-for-drinks-containers$ 

<sup>&</sup>lt;sup>22</sup> www.sustainabilityexchange.ac.uk/files/hygtb\_eauc\_prez\_nov\_2016.pdf

We urge you to move forward quickly to move this essential piece of waste legislation to restore the quality of our natural environment and to eliminate the unsightly litter we currently experience. We are happy to provide you with further information and research and stand ready to work with you to move this bill forward.