

Plastic Bag Levy in Irelandⁱ

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Brief summary of the case

In 2002 the Irish Government introduced a EUR 0.15 environmental levy on plastic bags at points of sale in order to reduce their consumption and adverse effects it had on Ireland's landscape.

Publically, discarded plastic bags amounted to 0.13% of litter pollution in 2015 compared to an estimated 5% in 2001.

The levy, which increased to EUR 0.22 in 2007, also generated a total of EUR 200 million over 12 years (2002-2013). This revenue has so far been used for administration and environmental projects, which are managed by the Environmental Fund and to fund Ireland's environmental protection agency, for environment remediation projects, awareness raising, and similar objectives.

Acceptance by stakeholders has been widespread. The levy has had a marginal impact in terms of jobs lost, has successfully influenced consumer behaviour, and is to this day considered as a good practice example for the implementation of such levies/taxes in other countries and continues to be promoted internationally.

1 Description of the design, scope and effectiveness of the instrument

1.1 Design of the instrument

In 2002, Ireland introduced a plastic bag levy at a rate of EUR 0.15 per bag, which increased to EUR 0.22 per bag from 2007.

The levy was introduced as an anti-litter measure aimed at reducing the use of disposable plastic bags, which accounted for 5% of Ireland's litter and had a highly visible impact on the Irish landscape – especially throughout the countryside and along coastlines (Convery et al 2007).

The Regulations do not distinguish between biodegradable plastic bags and other plastic bags (Department of the Environment, Community and Local Government, undated).

Paper bags are not subject to the levy, an exemption which has been criticised by NGOs for its failure to reflect scientific evidence (Friends of the Irish Environment 2013).

Exemptions were given to plastic bags when used for separating food for hygiene and food safety purposes. Provided that they are not bigger than 225mm in width, 345mm in depth and 450mm in length, plastic bags used to contain fish, meat, fresh poultry, fruits, nuts, vegetables, confectionary, dairy products, cooked food, and ice are not subject to the levy. Also exempted are plastic bags sold on ships, planes, in airports and those designed for re-

use which are sold to customers for a sum of not less than EUR 0.70 each (Waste Management Regulations 2001).

The levy was also introduced at the end of the winter when littered plastic bags are especially visible given limited vegetation, helping to make impacts even more visible.

1.2 Drivers and barriers of the instrument

In 1998, the government commissioned a study to identify fiscal measures to minimise the environmental impact of plastic bags. The report recommended the implementation of an upstream levy (on producers and importers) of approximately EUR 0.035 per bag, but the then Minister of Environment Mr. Noel Dempsey, following consultations with various stakeholders, pushed for a more convincing downstream EUR 0.15 levy per bag (on consumers) (Convery et al. 2007).

The levy was introduced in 2002 (Waste Management Regulations 2001), and was then increased from its previous level of EUR 0.15 to EUR 0.22 per bag from 2007 (Waste Management Regulations 2007). The reason for such an increase was that, despite the success of the levy, plastic bags used per capita had increased again from 21 in 2002 to 31 in 2006. The aim of the increase in the levy rate was therefore to reduce the plastic bag per capita usage to 21 or lower (Department of the Environment, Community and Local Government).

AP EnvEcon Limited (2008) reviewed Ireland's plastic bag levy and concluded that in order to be effective it needed to be more flexible. The authors suggested that the levy should be increased annually according to inflation, and that there should be an option to increase it by up to 10% of the base level for that year. Furthermore, in 2014 Irish government officials proposed to increase the levy from EUR 0.22 to EUR 0.25 (Irish Times 2014) but at the time of writing (mid 2016) none of these recommendations have been adopted; the reason for this has not been publicly stated.

According to Convery et al. (2007), an initial barrier to implementation was the concern of retailers that they would be blamed for the price of bags. Another concern was that the introduction of the levy would encourage shoplifting as a result of shoppers not having standard bags. Butchers, in particular, feared the drop in plastic bag use would result in weaker hygienic standards when purchasing meat products.

However, the Department of the Environment, Heritage and Local Government staged a very successful publicity campaign to launch the levy, conveying the environmental reasons (highly visible accumulation of litter) for its introduction. The campaign, which cost EUR 358,000, aimed at making a link between price and good environmental behaviour in the public mind, and reduced public resistance after the implementation of the levy (see 2003 survey in section 2).

Earmarking of revenues from the levy to the national Environmental Fund also increased acceptability and allayed concerns of retailers that they would be blamed for profiting from

the higher price of the bags. As mentioned above, exemptions were also applied to a range of food products to address concerns regarding food hygiene etc.

The government also ensured administration costs were kept low for retailers. Revenue collection and reporting is readily and easily integrated with their Value Added Tax (VAT) collection systems, so net additional costs are modest, and generally lower than the savings resulting from not having to purchase and store as many bags (Convery et al. 2007).

Another element in favour of the levy is that it has had a very limited impact on jobs, as the domestic production of plastic bags in Ireland amounts to roughly 20%, while the remaining 80% is imported (Fehily et al. 1999).

Not alone did Ireland's Environmental Minister directly championed the reform, he also secured the public support of the Finance Minister. "Support from the Minister for Finance, the Revenue Commissioners and the Local Authorities was necessary for the collection, administration and enforcement of the levy. The Minister's personal commitment seems to have been the strongest factor in getting the principle of a plastic bag levy introduced in practice" (Convery et al. 2007).

1.3 Revenue collection and use

The Department of Environment, Community and Local Government uses the National Litter Pollution Monitoring System to measure the impact of the plastic bag levy on an ongoing basis and to monitor trends in the average per capita consumption of plastic bags. This data is used to ensure that the levy is set at an appropriate level.

Local authorities are responsible for the enforcement of the levy at the point of sale, while the Revenue Commissioners are responsible for the collection of the levy due from retailers.

The revenue from the levy, details of which are available in the table below (Hogan 2013), goes into the Environmental Fund, created in 2002 with the introduction of the levy, and is used to finance environmental initiatives in Ireland and cover the cost of administering the levy.

Revenue has so far been used to finance environmental organisations and as projects such as schemes to prevent, reduce or recover waste, research and development into waste management, production, distribution and sale of products deemed to be less harmful to the environment than others, implementation of waste management plans, partnership projects in cooperation with local authorities to improve the quality of the environment for particular local communities, promotion of awareness campaigns, promotion of education and training to assist achievement of campaign objectives, and initiatives undertaken by community groups and others for protection of the environment (Department of the Environment, Community and Local Government).

In order to finance such projects, the Environmental Fund mostly uses revenues from the levies on plastic shopping bags and the landfill of waste. In 2013, revenue from the Environmental Levy on the Landfill of Waste amounted to over EUR 43 million, while income from the Environmental Levy on Plastic Bags at the end of the year (not shown in the table

below) was almost EUR 15 million. A full list of the income and expenditure account for the years 2012 and 2013 is available below (Environment Fund 2013).¹

The annual administration costs of the levy are relatively modest in comparison, with estimates in the order of EUR 350,000 (Convery et al. 2007).

Year	Levy Rate (€)	Plastic Bag levy (€m)
2002	0.15	10.4
2003	0.15	12.9
2004	0.15	15.3
2005	0.15	17.5
2006	0.15	19.9
2007	0.15/0.22 from 1 July	22.6
2008	0.22	26.7
2009	0.22	23.5
2010	0.22	17.5
2011	0.22	15.7
2012 Estimate (Cash Basis)	0.22	14.2
2013 Estimate (to 30 June 2013)	0.22	7.2
Total		203.4

As the table shows, revenues started to decline in 2008 after six years of steady increase. This was largely expected, considering that the aim of the levy is to change behaviour rather than raise revenue, and that the number of plastic bags sold has also decreased.

1.4 Environmental impacts and effectiveness

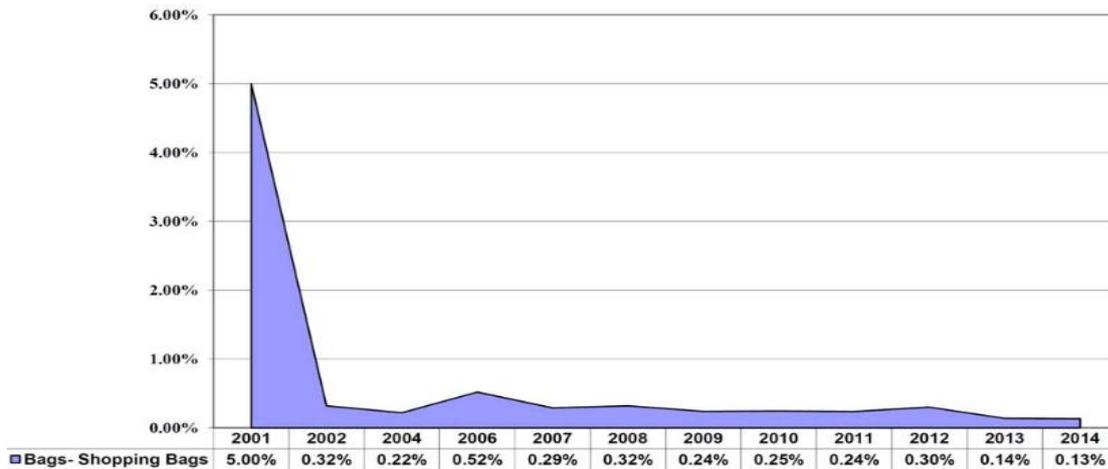
The most recent survey data available for 2014 shows that plastic bags constitute 0.13% of litter pollution compared to an estimated 5% prior to the introduction of the levy.

The results (see table below) show that there was a decrease in plastic bags during 2014 as a percentage of the National Litter Composition (The National Litter Pollution Monitoring System 2015). Put simply, there is 40 times less litter from plastic bags in Ireland today as compared to the year 2000.

In addition, it has been estimated that the amount of plastic bags in marine litter decreased from 5% in 2001 to 0.25% in 2010 after the introduction of the levy (Newman et al. 2013).

¹ <http://www.environ.ie/sites/default/files/migrated-files/en/Publications/Environment/Waste/WasteManagement/FileDownload%2C40050%2Cen.pdf>

Plastic Bags as a % of National Litter Composition



1.5 Other impacts

As introduced above, with 79% of plastic bags imported, the levy had a very limited employment impact in Ireland. The remaining 21% of bags were produced by four plastic manufacturing firms operating in the Republic (Fehily et al. 1999). Since the introduction of the levy, one of the plastic manufacturing companies has gone out of business causing the loss of 26 jobs, but it is uncertain whether this would have happened even in the absence of the levy (Convery et al. 2007).

Retailers have claimed that the levy has had a neutral or positive economic impact, with the additional costs of implementation, book-keeping integrated with VAT returns, being modest, and generally lower than the savings resulting from not having to purchase and store as many bags.

2 Stakeholder engagement

In general, the response from the main stakeholders was very positive in terms of implementation and acceptance. As emerges from a survey conducted by Convery et al. (2007), both the public and retail industry have praised the levy for its positive effect on the environment, with “many consumers feeling guilty when they forget to bring their own long life bag and have to pay the levy! [...] We are not aware of another tax that induces such an enthusiasm and affection from those who are liable to pay it” (Convery et al. 2007).

Commissioned by the Government, an 1999 survey highlighted a double standard among Irish consumers. Although generally in favour of environmental protection, they showed an unwillingness to take responsibility when it came to their own actions. Only 8% of the some 1,000 consumers surveyed were willing to pay for a plastic bag when its price exceeded EUR 0.076 (half of the approved levy), while 40% were not willing to pay at all (Drury 1999).

However, according to a national survey conducted by the Department of the Environment, Community and Local Government (2003) one year after the implementation of the levy, 91% of the people interviewed were in favour of the levy, mentioning its positive impact on the

environment and on the streets, and the positive use of re-usable bags as reasons for its success. Only 6% were against, lamenting that they missed having plastic bags at home, and frustration when they forgot their re-usable bag. 3% had no opinion.

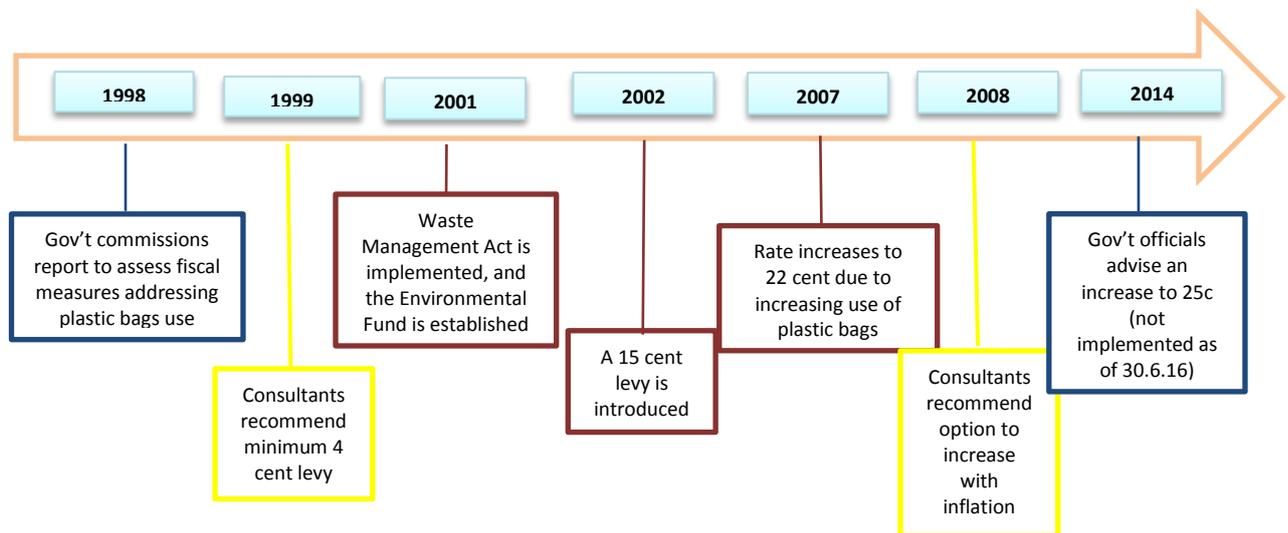
Key stakeholders involved include the Department of the Environment, Heritage and Local Government, The Litter Monitoring Body, and An Taisce (The National Trust for Ireland).

Securing support from consumers and the industry was key to the successful implementation of the levy. The retail industry initially proposed a voluntary take back, showing some resistance to the levy. Extensive consultations were then undertaken with the manufacturers, importers/distributors and various retail sector umbrella groups to reach an agreement on how to implement the levy, although the government was already determined to proceed.

During the consultations, upstream solutions such as levies on imported bags, production and wholesale were all explored, but eventually not pursued in favour of a downstream levy (see section 1). Supply side levies, Fehily et al (1999) concluded, are easy to administer, but also perhaps less efficient in reducing consumption as retailers could absorb or indirectly pass on the costs, while continuing to supply plastic bags to customers. A downstream levy, on the other hand, truly reflects the “polluter pays” principle.

The Department of the Environment, through the National Litter Pollution Monitoring System, evaluates the environmental impact of the levy on a yearly basis.

A number of other surveys to assess the environmental benefits of the levy were also produced by Irish Business Against Litter and An Taisce – all of which suggested the levy successfully reduced litter.



3 Windows of opportunity

Convery et al. (2007) show that although the interaction with stakeholders (retailers, producers, importers and various trade groups) was extensive and continuous, it was made clear to each of the stakeholders involved that a levy was going to be introduced and the consultation process was aimed at facilitating a smooth introduction (allowing consultation

and flexibility). Initial opposition quickly gave way to a level of acceptance, which was mainly a result of the commitment of the Minister.

“The commitment of a Minister at Cabinet level was crucial in ensuring that the various arms of government collaborated, so that the proposal went from concept to successful execution. Without Mr. Dempsey’s enthusiastic and effective support, it would not have happened, and it is likely that the voluntary scheme initially preferred by industry would have been selected. In addition, a robust legislative and regulatory base that involved amending the Waste Management Act was necessary” (Convery et al. 2007).

4 Insights into future potential/reform

Below is an analysis of the main lessons from Ireland, as outlined by Convery et al. (2007):

“The introduction of a price signal through the use of a product tax can influence consumer behaviour significantly; secondly, ensuring stakeholder and consumer acceptance of the tax is central to the successful implementation of such a tax. Informational campaigns highlighting the environmental impacts and hypothecation of revenues into an environment fund are central in ensuring such acceptance. In the case of this tax, high-level support from both the supporting minister and the treasury was also required.

In addition, evidence from other jurisdictions indicates that, where policy-makers are trying to reduce plastic bag consumption considerably and there is a well-developed and defined retail market (and that has been consulted widely), a consumer-based “downstream” levy is the appropriate policy measure”.

According to a study conducted by Eunomia (Hogg et al. 2011), an important lesson learned is that levies on plastic bags tend to be more successful when they are passed directly to consumers.

Basing her claims on an EEA checklist for the successful implementation of environmental taxes, Killian (2005) argued that some things could have been done more effectively. The process of implementation of the levy was criticised for poor consultation with stakeholders in the early stage. Killian was also critical of the failure to include built-in evaluation measures and the system of recycling revenues.

Although consultation with a variety of stakeholders was extensive and continuous, retailers were not involved in designing the levy, or in drawing up the information that was issued to them. Monitoring implementation was also limited, with relatively little information on the environmental impact of alternatives such as paper bags. Furthermore, there is no satisfactory way of measuring the degree of reuse of more durable bags. Finally, the ring-fencing of the levy into the Environmental Fund, albeit instrumental for public acceptance, prevented the government from using the revenue to reduce other detrimental taxes such as those on labour and enterprise. It should be noted, however, that the relatively modest annual revenue from the measure (now in the region of EUR 15m a year) is not at a level which permits substantial tax to be shifted away from labour.

4.1 Actual Planned reforms and stakeholder engagement

See above (Section 1)

4.2 Suggestions for future reforms – instrument design and civil society engagement

See below (Section 4.3) and above (Section 1).

In July 2016, officials in the Department of the Environment announced they will consider proposals for the introduction of a levy on disposable containers. The details of the proposals are not available yet, but given the success of the plastic bag levy, Ireland could draw on its own experience to tackle the twin issues of litter and waste while also providing some extra revenue for the Environment Fund.

4.3 Suggestions for replicability

In a recent study, Eumonia (Hogg et al. 2011) recommends the following approach when implementing instruments that are similar to Ireland's plastic bag levy:

- Apply taxes to items where alternatives are clearly available;
- Continually review the tax to ensure that its effectiveness is not eroded over time;
- 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.
- Albeit this is desirable rather than necessary, it is helpful to introduce such measures against the backdrop of a direct and variable rate charging for household waste. This can help strengthen the response to price changes occasioned by the tax.

Ireland's plastic bag levy can be compared with the Belgian eco-taxation on disposable plastic bags, disposable kitchen utensils, food wrap & aluminium foil; and the Romanian eco-taxation on disposable plastic bags (Hogg et al. 2011).

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ⁱ This case study was prepared as part of the study ‘Capacity building, programmatic development and communication in the field of environmental taxation and budgetary reform’, carried out for DG Environment of the European Commission during 2016-2017 (European Commission Service Contract No 07.027729/2015/718767/SER/ENV.F.1) and led by the Institute for European Environmental Policy (www.ieep.eu). This manuscript was completed in December 2016.