

Packaging taxes in Belgium¹

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Brief summary of the case

Belgium introduced a Packaging Levy on beverage containers in 1993 alongside other environmental taxes, and added an Environmental Levy covering single-use plastic bags, along with some other environmentally damaging products, in 2007. The Packaging Levy was introduced as a concession to opposition parties during political negotiations, and was not specifically linked to one environmental goal. The Environmental Levy, though, was introduced on the back of a communications campaign and industry voluntary agreement over several years, and had the specific intention of disincentivising the use of the targeted products, including single-use plastic bags. This is perhaps reflected in the responses to the two levies; the Packaging Levy met with industry, and to some extent public, opposition and dissatisfaction, whilst the Environmental Levy provoked less discontent. The net result of this is that the Environmental Levy can be seen as highly successful in meeting its specific goal of reducing single-use plastic bag usage; from 2008 to 2009, distribution of these dropped by 60%. The Packaging Levy, however, is more difficult to assess; whilst it has clearly incentivised recycling of packaging, it has been less successful in promoting re-use. Lessons to learn from this experience include the need to engage consumers and industry at an early stage, and to set explicit goals or targets for the policy instrument.

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

1.1 Design of the instrument

A tax on beverage containers, known as the 'Packaging Levy' (Haulotte *et al.*, 2016), was introduced alongside other ecotaxes in 1993 (De Clercq, 1994). It was designed to encourage consumer behaviour change to promote re-use through deposit refund systems and recycling by changing the relative prices of products (Eunomia *et al.*, 2009). The rate of the tax was 15 Francs (EUR 0.37) for all types of beverage container, regardless of reusability (European Commission, 2000). However, exemptions were applied, based on rates of recycling or re-use of the products; Belgian industry created Fost Plus¹ in order to better achieve these recycling rates (interview with John Wante, 2016). The Packaging Levy was reformed in 2004, exempting all beverage containers from VAT but also introducing much higher rates of tax, especially for containers which are not reusable, with the overall aim of reducing the price of reusable packaging but maintaining higher prices for other containers (interview with Kris Bachus, 2016; Lavrysen *et al.*, 2004). The preference given to reusable over recyclable containers was subject to legal challenges in 2005 and 2007 (Green Alliance, 2008). By 2016, the levy was EUR 9.86/hectolitre for non-reusable and EUR 1.81/hectolitre for reusable containers (Haulotte *et al.*, 2016).

¹ Fost Plus is a body set up to promote, coordinate and finance the selective collecting, sorting and recycling of household packaging waste in Belgium.

The second tax which applied to packaging in Belgium was the ‘Environmental Levy’ introduced from 2007 (Haulotte *et al.*, 2016). Due to public scepticism of the motives behind the levy, the plan for a broad range of levies was eventually scaled back to economic disincentives for four groups of products: single-use carrier bags (EUR 3/kg), single-use plastic (EUR 2.70/kg) and aluminium foil (EUR 4.50/kg), and disposable plastic cutlery (EUR 3.60/kg) (Eunomia *et al.*, 2009). Biodegradable bags were exempted from the tax. From 1 January 2015, the Environmental Levy was abolished; the explanation given was that the levy had succeeded in achieving its objectives (Chambre des Représentants de Belgique, 2014).

1.2 Drivers and barriers of the instrument

The Packaging Levy was aimed at increasing the re-use and recycling of products, and was driven primarily by Belgian green political parties, with support from environmental groups (interview with John Wante, 2016). The ecotaxes formed part of national legislation on the reform of the Belgian state, and was included at the request of the regional green parties in return for their support for the overall legislation (De Clercq, 1994). However, once the reform was passed, the green parties formed no part of the ruling majority, and as a result implementation of the ecotaxes was delayed and to an extent watered down (Eunomia *et al.*, 2009).

The introduction of the Environmental Levy was designed to disincentivise the consumption of the liable single-use disposable products; for example, the addition of the levy doubled the cost of aluminium foil (IGBE, 2011). Whilst this clearly represents a significant change, the tax on plastic bags introduced as part of this levy was in fact a more organic process, following on from communications campaigns and voluntary agreements to reduce plastic bag use. Reductions in the use of carrier bags were noticeable prior to the introduction of the tax, going beyond the goals of the voluntary agreement (IBGE, 2011). However, the tax has been focussed on large supermarkets, and has been less effective in smaller retail outlets, which continued to provide the bags free of charge (interview with Kris Bachus, 2016).

1.3 Revenue collection and use

Revenue raised by the taxes is retained by the national government i.e. it is not earmarked for any particular expenditure. The levy is due once products are put on the market for consumers, and is paid by the party placing the packaging on the market (European Commission, 2000). Revenue from the Packaging Levy in 2012 was EUR 317.7m, or 0.085% of Belgian GDP (Eunomia *et al.*, 2014). By 2016 this was EUR 337.8m, still around 0.085% of GDP (FOD Financiën, 2017). The fluctuations in rates across the mid-2000s make comparisons difficult; the 2016 revenue was a marked rise from EUR 203.8m in 2004, but lower than the EUR 343.9m of revenue in 2005. Revenue from the carrier bag levy in the Environmental Levy dropped drastically after the first full year of implementation; revenue was EUR 1.2m in 2008, and fell to EUR 0.46m in 2009 before rising slightly to EUR 0.55m in 2010. As the rate remained the same, this clearly reflects a drop in the amount of bags subjected to the levy (IBGE, 2011). The overall revenue derived from the Environmental Levy remained broadly similar from 2008 to 2012, reflecting the relatively small contribution which levies on disposable bags made to the overall total (~4% in 2010) (IGBE, 2011).

Year	Packaging Levy Revenue (€)	Environmental Levy Revenue (€)
2004	203.8 ¹	N/A
2005	343.9	N/A
2006	295.8 ²	N/A
2007	308.3	4.7 ³
2008	310.3	13.5
2009	320.4	12.1
2010	319.9	14.9
2011	317.7	12.4
2012	332.0	13.6
2013	330.8	13.6
2014	335.6	12.9
2015	337.8	1.2
2016	308.3	-0.5

¹The exemptions for reusable containers under the Packaging Levy were subject to legal challenge in 2004 and subsequently removed

²The exemption system for the Packaging Levy was altered in 2006

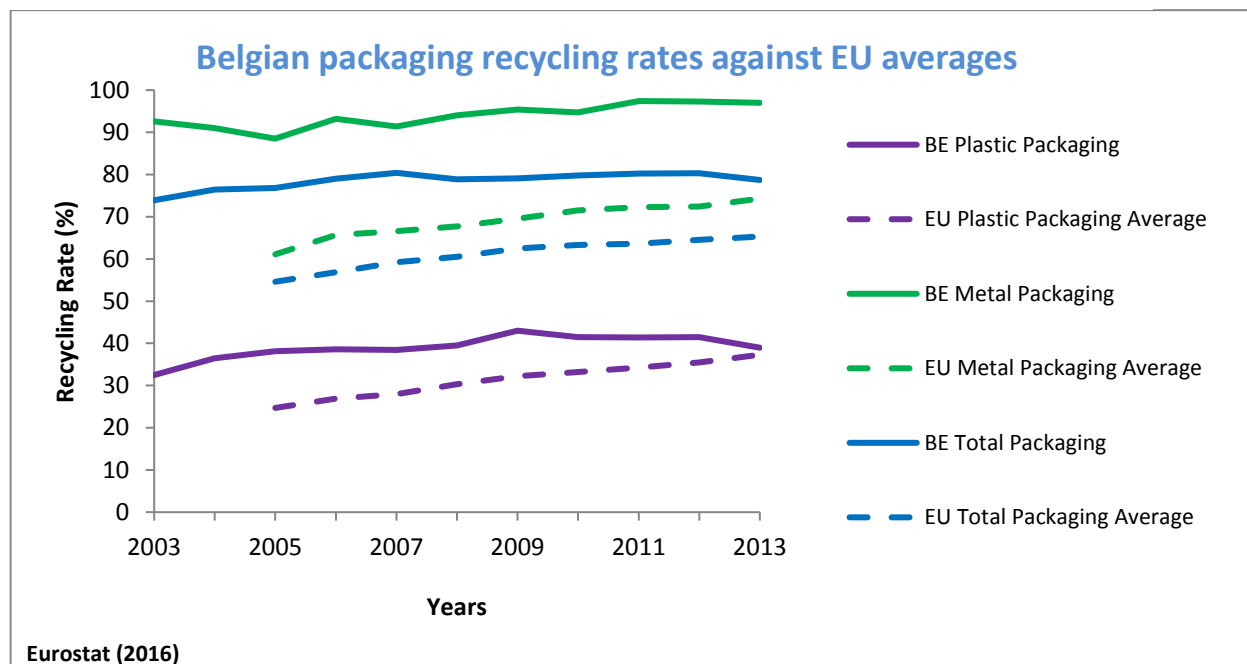
³The Environmental Levy was introduced in the second half of 2007 (OECD, 2016)

1.4 Environmental impacts and effectiveness

It has been suggested that the level of taxation provided by both instruments was too low to effectively incentivise consumer behaviour change in isolation (interview with John Wante, 2016), and it is necessary to consider the reaction of industry as well as consumers in determining how effective the policies were.

It is difficult to assess the efficacy of the Packaging Levy. This is partly because the levy did not have a single explicit intention, but rather tried to cover different goals, primarily of promoting re-use and also recycling, but also of tackling littering and reducing CO₂ emissions (Green Alliance, 2008). In terms of promoting re-use, a European Commission study could not prove a positive impact on rates of packaging reuse stemming from the Packaging Levy (Jansen, 1999), whilst between 2003 and 2011 the market share for refillable containers fell from 11.3% to 8% (Green Alliance, 2008). However, this drop may have been magnified in the absence of the Packaging Levy, and indeed Eunuomia *et al.* (2009) saw evidence of a decoupling of single-use packaging growth from GDP between 1993 and 2006. Additionally, Belgium's recycling rate for both plastic and metal packaging waste is above the EU average, as is the total packaging recycling rate (Eurostat, 2016). Whilst these waste streams are not directly analogous with beverage containers, it seems likely that the success of Fost Plus contributes directly to such high recycling rates, and as such this could be seen as a direct result of the collection infrastructure which developed in response to the ecotax legislation (Green Alliance, 2008).

Figure 1: Packaging recycling rates in Belgium compared to the EU average



The Environmental Levy has also met with mixed success. There does seem to have been success for the section of the levy relating to disposable carrier bags. The revenue gained from this element of the tax decreased by 60% between 2008 and 2009, which represents a reduction of 231.3 tonnes worth of carrier bags taxed, or just over 36 million fewer bags (at 6.4g per bag) distributed by participating retailers (IBGE, 2011). However, this must be seen in the context of a drop in disposable carrier bag usage across a broader scope of Belgian retailers during the 2000s; COMEOS, the Belgian retail federation, indicated that members saw a reduction in carrier bag usage of 86% (or 765 million bags) between 2003 and 2010. That such significant change occurred outside the scope of the Environmental Levy indicates wider underlying contributory factors. Meanwhile, the sale of reusable bags rose tenfold between 2003 and 2010, from 7.6 million to 76.6 million (Ibid). This may represent significant savings in terms of energy, greenhouse gas emissions and littering, among other environmental metrics (IBGE, 2011). However, it is difficult to monitor what level of reuse actually took place to quantify those impacts. Also, the reduction was focussed on supermarkets, with the change in distribution of single-use bags at smaller stores much less dramatic. Finally, as behaviour change was occurring prior to the introduction of the tax in 2007, it is difficult to know the scale of reductions that would have occurred without the tax in place; indeed it could be suggested that the withdrawal of the Environmental Levy on carrier bags was at least partially due to the efficacy of other initiatives such as industry voluntary schemes in producing the same result (interview with John Wante, 2016).

Overall, though, the objective of the levy to reduce the use of carrier bags has clearly been achieved. However, revenue from the Environmental Levy as a whole remained relatively constant throughout the lifetime of the tax. Combined with reduced revenues for disposable bags, this would suggest that revenues for those targeted products other than disposable carrier bags – plastic and aluminium foils, and disposable cutlery – remained stable or even rose slightly during the lifetime of the levy, and indeed studies found that although consumer prices per product were raised, there has been less evidence of a change in consumption

(Eunomia, 2010). However, as with the Packaging Levy, it is difficult to determine what the level of consumption would have been in the absence of any levy, making a fair evaluation of success or failure complicated.

1.5 Other impacts

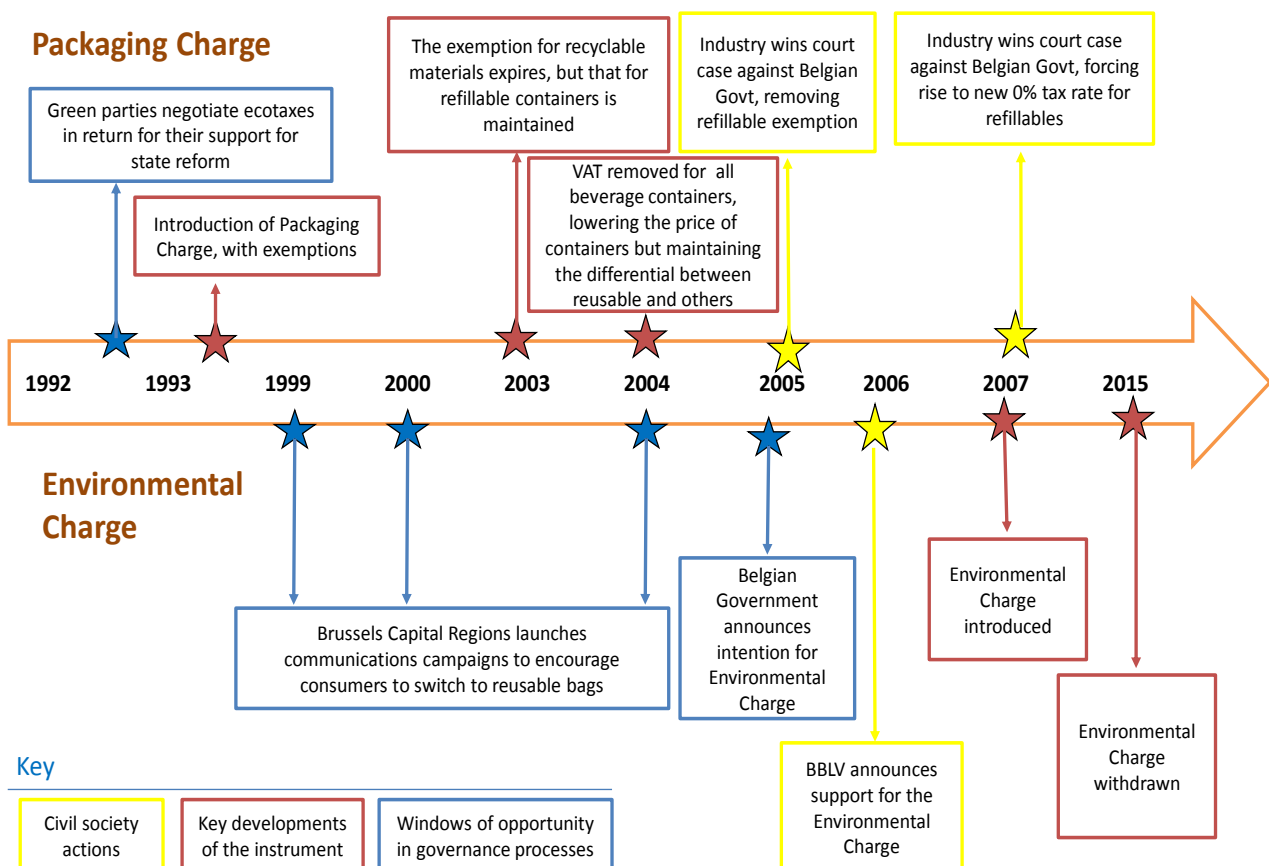
Eunomia *et al.* (2009) finds few social or distributional impacts from the ecotax system, but cautions that such taxes could be considered regressive, with the potential for larger impacts on low income or larger families. However, the same study notes that the levies are only applied to products where there is a viable alternative, allowing a route to avoiding the tax, and in practice there seems to be little firm evidence of regressive effects from the levies.

2 Stakeholder engagement and Windows of Opportunity

Key stakeholders for both levies included industry and consumers, as well as environmental groups. The Packaging Levy’s main support came from the regional Green parties, supported by environmental groups. However, industry and some Unions were opposed to the Packaging Levy, claiming the costs would add an undue burden to Belgian producers and consumers (Beulens, 2001). Industry made several legal challenges to the Packaging Levy in the mid-2000s (Green Alliance, 2008).

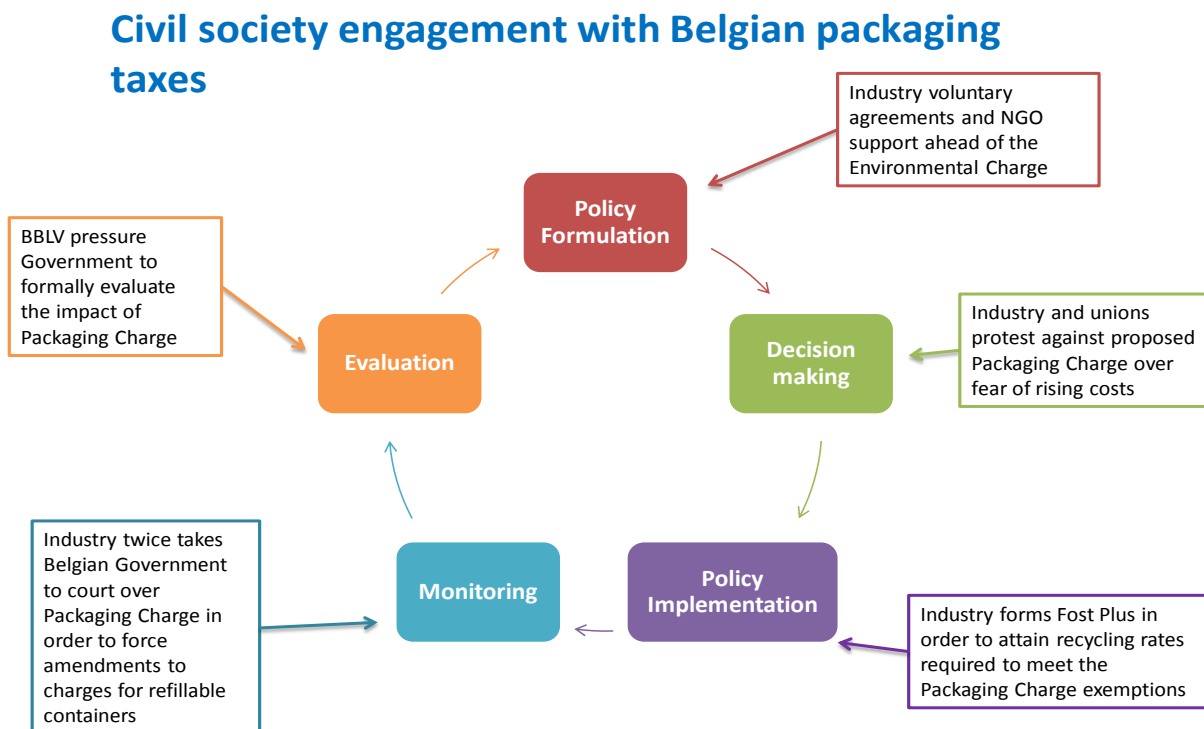
There was, however, a generally more positive reaction to the Environmental Levy on plastic bags, possibly due to the existing voluntary initiatives and communications campaigns in this area prior to 2007 (interview with Kris Bachus, 2016). BBLV, a Belgian environmental NGO,

Timeline of key developments in Belgian packaging taxes



announced support for the Environmental Levy ahead of its implementation, and expressed regret at the lack of political support for further charges (BBLV, 2006). However, they were not actively consulted during policy development of either instrument (interview with Kris Bachus, 2016).

The general public reaction to the levies was muted, possibly due to the relatively low levels of taxation per product (interview with John Wante, 2016), but at times appeared cynical. This was perhaps most noticeable when the Environmental Levy was markedly scaled down in terms of the products to be covered by the levy due to the public reaction (Eunomia *et al.*, 2009), but was also apparent when the rate of the Packaging Levy was raised by almost 50% in 2005; it was alleged that Belgian consumers were travelling cross-border to buy beverages in order to avoid the levy, although no reliable evidence of this was recorded (Interview with Kris Bachus, 2016). Because of the lack of earmarking of revenue use, many felt that the taxes were enacted for the purpose of raising revenue rather than achieving environmental goals (Green Alliance, 2008).



3 Insights into future potential/reform

3.1 Actual Planned reforms and stakeholder engagement

The Environmental Levy was discontinued at the end of 2014. Subsequently, each of the Belgian regions has been considering plans for a regional tax on single-use plastic bags. There are no planned reforms for the Packaging Levy (interview with Kris Bachus, 2016). Flanders is considering further EPR schemes for materials including textiles, whilst municipalities favour a Deposit Refund System for some beverage packaging to combat problems with litter

(interview with John Wante, 2016). No plans to replace the levy on disposable cutlery have been identified.

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

Whilst, as mentioned above, the Environmental Levy has been withdrawn, Eunomia *et al* (2014) made a number of suggestions for further packaging levies that could be imposed in Belgium, and suggested appropriate rates to charge (Table 1).

Table 1 - Suggested product packaging rates for Belgium (Eunomia et al., 2014)

Product	Rate (per tonne)
Aluminium	EUR 197
Plastic	EUR 64
Steel	EUR 54
Paper and card	EUR 20
Glass	EUR 18
Wood	EUR 13

These rates were proposed at a level to incentivise waste prevention as well as encourage recycling, addressing what could be seen as a flaw in the system which applied from 1993-2015 in Belgium.

3.3 Suggestions for replicability

Belgium's experience with ecotaxes has been broadly successful, and is easily replicable in other countries; indeed, several other EU Member States already have packaging levies, especially on materials covered by the Packaging and Packaging Waste Directive targets. However, lessons to learn include:

- The link to environmental goals should be specific and explicit. A major criticism of the original tranche of Belgium's ecotaxes was the confused link between the economic instruments and the supposed objective.
- The success of the Environmental Levy built on successful communications campaigns and voluntary agreements before its introduction, and this contrasts to the more controversial imposition of the Packaging Levy as part of a political agreement.

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