

Title: AMENDMENT OF CARRIER BAG LEVY LEGISLATION TO INCREASE THE LEVY, REMOVE THE THRESHOLD, SIMPLIFY AND REMOVE SOME EXEMPTIONS	Regulatory Impact Assessment (RIA)		
	Date: April 2021		
	Type of measure: Consultation		
Lead department or agency: Department of Agriculture, Environment and Rural Affairs (DAERA)	Stage: Initial		
	Source of intervention: Domestic NI		
Other departments or agencies:	Contact details: RORY O'BOYLE		
	Head of Carrier Bag Levy Team		
	Ballykelly House		

Summary Intervention and Options

What is the problem under consideration? Why is government intervention necessary? (7 lines maximum) Carrier Bag Levy legislation was introduced in Northern Ireland (NI) in 2013 and although overall bag usage has decreased, annual validated statistics and anecdotal evidence shows a marked and continual increase in the use by consumers of heavy duty carrier bags, usually priced above 5 pence. There is little evidence to date suggesting that such bags are re-used on a regular basis and an increase in the levy and removal of the existing 20 pence charging threshold is considered necessary to further decrease overall bag usage and encourage their regular re-use. Some exemptions also need updated which will potentially simplify the Regulations for consumers but primarily make administration requirements easier for the retail sector.	
What are the policy objectives and the intended effects? (7 lines maximum) The primary objective is to maintain, improve and enhance the environment in Northern Ireland for all, by reducing the number of carrier bags in circulation, removing the existing threshold and by increasing the levy charge itself. Any carrier bag distributed, regardless of material, has an environmental impact and further reduction of distribution is necessary. In addition, by removing some exemptions (one particular bag size and bags on ships, trains, aircrafts, buses & restricted areas and gusseted liners) and simplifying others (condensing various exempt bags into one size) the Regulations will be clearer with implementation and administration easier for retailers.	
What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base) (10 lines maximum) Four options were considered in respect of the levy charge and threshold - Option 1; Do nothing: Option 2: increase the levy to 10 pence and remove the existing 20 pence threshold; Option 3: increase the levy to 20 pence and remove the threshold: Option 4: increase the levy to 25 pence and remove the threshold. In addition to any change to the levy charge and removal of the threshold, the removal and simplification of exemptions are also being considered under options 2, 3 & 4. Option 3 or Option 4 to increase the levy to 20 pence or 25 pence are the preferred options. Both options include removal of the threshold and amending/removing some exemptions. It is considered that option 3 or 4 will have the greatest impact on reducing bags in circulation, positively influencing both retailer and customer behaviour, with the removal of the charging threshold and simplification of exemptions also making compliance simpler for retailers.	
Will the policy be reviewed? It will be reviewed	If applicable, set review date: APRIL 2027

Cost of Preferred (or more likely) Option		
Total outlay cost for business £m	Total net cost to business per year £m	Annual cost for implementation by Regulator £m
£483,242 (either option)	Option 3 £6,723,686 Option 4 £7,943,354	£0 no additional costs

Does Implementation go beyond minimum EU requirements?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>		
Is this measure likely to impact on trade and investment?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>		
Are any of these organisations in scope?	Micro Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Small Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Medium Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Large Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

The final RIA supporting legislation must be attached to the Explanatory Memorandum and published with it.

Approved by: *D.S. Feltz*

Date: 12 May 2021

ECONOMIC ASSESSMENT (Option 1)

Costs (£m)	Total Transitional (Policy)		Average Annual (recurring)	Total Cost
	(constant price)	Years	(excl. transitional) (constant price)	(Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	£0		£0	£0
Description and scale of key monetised costs by 'main affected groups' Maximum 5 lines No change from current situation – no monetised costs.				
Other key non-monetised costs by 'main affected groups' Maximum 5 lines No change from current situation – no non-monetised costs.				
Benefits (£m)	Total Transitional (Policy)		Average Annual (recurring)	Total Benefit
	(constant price)	Years	(excl. transitional) (constant price)	(Present Value)
Low	Optional		Optional	Optional
High	Optional		Optional	Optional
Best Estimate	£0		£0	£0
Description and scale of key monetised benefits by 'main affected groups' Maximum 5 lines No change from current situation – no monetised benefits.				
Other key non-monetised benefits by 'main affected groups' Maximum 5 lines No change from current situation – no non-monetised benefits.				
Key Assumptions, Sensitivities, Risks Maximum 5 lines Status quo will remain the same, no change to current situation.				

BUSINESS ASSESSMENT (Option 1)

Direct Impact on business (Equivalent Annual) £m			
Costs: £0	Benefits: £0	Net: £0	

Cross Border Issues (Option 1)

<p>How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland) Maximum 3 lines</p> <p>UK regions - Scotland have increased the levy to 10 pence from 01 April 2021, England are increasing the levy to 10 pence from May 2021 and Wales is considering their current policy. The Republic of Ireland currently charge 22 cents for plastic bags only, they have been considering an increase to 25 cents. EU Member States impose either bans (under 50 microns only) or levies.</p>

Summary: Analysis and Evidence

Policy Option 2

Description: Increase levy to 10p, remove threshold, remove/amend exemptions

ECONOMIC ASSESSMENT (Option 2)

Costs (£m)	Total Transitional (Policy)		Average Annual (recurring) (excl. transitional) (constant price)	Total Cost (Present Value)
	(constant price)	Years		
Low	Optional	1	Optional	Optional
High	Optional		Optional	Optional
Best Estimate	£483,242		£3,255,935	£20,018,852

Description and scale of key monetised costs by 'main affected groups' Maximum 5 lines
35% of consumers will be impacted by an additional cost of 5 pence per bag, as a wide range of bags are already priced at 10 pence and above therefore 65% of consumers will not be affected. Removal of the threshold will potentially impact a small number of retailers for the first time who have always priced bags at 20 pence and above primarily as they will have some set up, IT and staff training costs. Most NI retailers will incur minimal additional transitional costs, i.e. staff training costs, as their IT systems and personnel are already in place similar to the departmental systems which are also in place to collect and enforce the levy.

Other key non-monetised costs by 'main affected groups' Maximum 5 lines
Positive behavioural responses by consumers and retailers will improve the environment of NI for all with wider societal benefits from reduced litter, including marine litter, cleaner beaches and a better understanding of the environment as a whole. This environmental awareness may encourage everyone to buy into future environmental initiatives such as the reduction of single use plastics, green growth and the wider NI environment strategy.

Benefits (£m)	Total Transitional (Policy)		Average Annual (recurring) (excl. transitional) (constant price)	Total Benefit (Present Value)
	(constant price)	Years		
Low	Optional	0	Optional	Optional
High	Optional		Optional	Optional
Best Estimate	0		£3,255,935	£19,535,610

Description and scale of key monetised benefits by 'main affected groups' Maximum 5 lines
Retailers could expect to distribute fewer bags, reducing overall outlay. DAERA anticipates additional revenue, which will be used to fund further environmental projects across NI. Since additional revenue will be available, more environmental projects may benefit as reinvestment of proceeds becomes. The increase in the levy will encourage consumers to bring and reuse their own bag, thus reducing their cost per shop, with any additional cost to consumers offset by the environmental benefits from the revenue reinvested.

Other key non-monetised benefits by 'main affected groups' Maximum 5 lines
A cleaner, greener NI which is a better place to live and do business as well as encouraging wildlife and biodiversity will benefit society as a whole, while also promoting resource efficiency. Reduced litter, including marine litter delivering cleaner beaches, hedgerows and green spaces will contribute to the positive mental health and wellbeing of everyone in NI.

Key Assumptions, Sensitivities, Risks Maximum 5 lines
It is assumed that an increase to the levy will equate to a decrease in carrier bag circulation and usage. Uncertainty surrounds shopping trends, high street trading and market structure post COVID 19 with further uncertainties around the types of bags and pricing points in the retail sector. The data set is incomplete, with limited data for bags of 20 pence and above and as such there is a risk this change will not sufficiently positively impact consumer behaviour, as many already pay 20 pence and above for carrier bags.

BUSINESS ASSESSMENT (Option 2)

Direct Impact on business (Equivalent Annual) £m		
Costs: £483,242	Benefits: £0	Net: £483,242

Cross Border Issues (Option 2)

How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland) Maximum 3 lines
UK regions - Scotland have increased the levy to 10 pence from 01 April 2021, England are increasing the levy to 10 pence from May 2021 and Wales is considering their current policy. The Republic of Ireland currently charge 22 cents for plastic bags only, they have been considering an increase to 25 cents. EU Member States impose either bans (under 50 microns only) or levies.

Summary: Analysis and Evidence

Policy Option 3

Description: Increase levy to 20p, remove threshold, remove/amend exemptions

ECONOMIC ASSESSMENT (Option 3)

Costs (£m)	Total Transitional (Policy)		Average Annual (recurring) (excl. transitional) (constant price)	Total Cost (Present Value)
	(constant price)	Years		
Low	Optional	1	Optional	Optional
High	Optional		Optional	Optional
Best Estimate	£483,242		£6,723,686	£40,825,358

Description and scale of key monetised costs by 'main affected groups' Maximum 5 lines
75% of consumers will be impacted by an additional cost of 15 pence per bag, although the top 4 grocery retailers in NI already price bags at 20 pence and above so 25% consumers will not be affected. Removal of the threshold will potentially impact a small number of retailers for the first time who have always priced bags at 20 pence and above primarily as they will have some set up, IT and staff training costs. Most NI retailers will incur minimal additional transitional costs i.e. staff training costs, as their IT systems and personnel are already in place similar to the departmental systems which are also in place to collect and enforce the levy.

Other key non-monetised costs by 'main affected groups' Maximum 5 lines
Positive behavioural responses by consumers and retailers will improve the environment of NI for all with wider societal benefits from reduced litter, including marine litter, cleaner beaches and a better understanding of the environment as a whole. This environmental awareness may encourage everyone to buy into future environmental initiatives such as the reduction of single use plastics, green growth and the wider NI environment strategy.

Benefits (£m)	Total Transitional (Policy)		Average Annual (recurring) (excl. transitional) (constant price)	Total Benefit (Present Value)
	(constant price)	Years		
Low	Optional	0	Optional	Optional
High	Optional		Optional	Optional
Best Estimate	£0		£6,723,686	£40,342,116

Description and scale of key monetised benefits by 'main affected groups' Maximum 5 lines
Retailers could expect to distribute fewer bags, reducing overall outlay. DAERA anticipates additional revenue, which will be used to fund further environmental projects across NI. Since additional revenue will be available, more environmental projects may benefit as reinvestment of proceeds becomes available. The increase in the levy will encourage consumers to bring and reuse their own bag, thus reducing their cost per shop, with any additional cost to consumers offset by the environmental benefits from the revenue reinvested.

Other key non-monetised benefits by 'main affected groups' Maximum 5 lines
A cleaner, greener NI which is a better place to live and do business as well as encouraging wildlife and biodiversity will benefit society as a whole, while also promoting resource efficiency. Reduced litter, including marine litter delivering cleaner beaches, hedgerows and green spaces will contribute to the positive mental health and wellbeing of everyone in NI.

Key Assumptions, Sensitivities, Risks Maximum 5 lines
It is assumed that an increase to the levy will equate to a decrease in carrier bag circulation and usage. Uncertainty surrounds shopping trends, high street trading and market structure post COVID 19 with further uncertainties around the types of bags and pricing points in the retail sector. The data set is incomplete, with limited data for bags of 20 pence and above and as such there is a risk this change will not sufficiently positively impact consumer behaviour, as many already pay 20 pence and above for carrier bags.

BUSINESS ASSESSMENT (Option 3)

Direct Impact on business (Equivalent Annual) £m			
Costs: £483,242	Benefits: £0	Net: £483,242	

Cross Border Issues (Option 3)

How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland) Maximum 3 lines
UK regions - Scotland have increased the levy to 10 pence from 01 April 2021, England are increasing the levy to 10 pence from May 2021 and Wales is considering their current policy. The Republic of Ireland currently charge 22 cents for plastic bags only, they have been considering an increase to 25 cents. EU Member States impose either bans (under 50 microns only) or levies.

Summary: Analysis and Evidence

Policy Option 4

Description: Increase levy to 25p, remove threshold, remove/amend exemptions

ECONOMIC ASSESSMENT (Option 4)

Costs (£m)	Total Transitional (Policy)		Average Annual (recurring) (excl. transitional) (constant price)	Total Cost (Present Value)
	(constant price)	Years		
Low	Optional	1	Optional	Optional
High	Optional		Optional	Optional
Best Estimate	£483,242		£7,943,354	£48,143,366

Description and scale of key monetised costs by 'main affected groups' Maximum 5 lines
 Virtually all consumers will be impacted by an additional cost. The top 4 grocery retailers already price bags at 20 pence and above so many consumers will not be affected. Removal of the threshold will potentially impact a small number of retailers for the first time who have always priced bags at 20 pence and above primarily as they will have some set up, IT and staff training costs. Most NI retailers will incur minimal additional transitional costs i.e. staff training, as their IT systems and personnel are already in place similar to the departmental systems which are also in place to collect and enforce the levy.

Other key non-monetised costs by 'main affected groups' Maximum 5 lines
 Positive behavioural responses by consumers and retailers will improve the environment of NI for all with wider societal will benefit from reduced litter, including marine litter, cleaner beaches, a better understanding of the environment as a whole. This environmental awareness may encourage everyone to buy into future environmental initiatives such as the reduction of single use plastics, green growth as well as the wider environment strategy.

Benefits (£m)	Total Transitional (Policy)		Average Annual (recurring) (excl. transitional) (constant price)	Total Benefit (Present Value)
	(constant price)	Years		
Low	Optional	0	Optional	Optional
High	Optional		Optional	Optional
Best Estimate	£0		£7,943,354	£47,660,124

Description and scale of key monetised benefits by 'main affected groups' Maximum 5 lines
 Retailers could expect to distribute fewer bags, reducing outlay, transportation and storage costs. DAERA anticipates additional revenue, which will be used to fund further environmental projects across NI. Since additional revenue will be available, more environmental projects may benefit as reinvestment of proceeds becomes available. The increase in the levy will encourage consumers to bring and reuse their own bag, thus reducing their cost per shop, with any additional cost to consumers offset by the environmental benefits from the revenue reinvested.

Other key non-monetised benefits by 'main affected groups' Maximum 5 lines
 A cleaner, greener NI which is a better place to live and do business as well as encouraging wildlife and biodiversity will benefit society as a whole, while also promoting resource efficiency. Reduced litter, including marine litter delivering cleaner beaches, hedgerows and green spaces will contribute to the positive mental health and wellbeing of everyone in NI.

Key Assumptions, Sensitivities, Risks Maximum 5 lines
 It is assumed that an increase to the levy will equate to a decrease in carrier bag circulation and usage. Uncertainty surrounds shopping trends, high street trading and market structure post COVID 19 with further uncertainties around the types of bags and pricing points in the retail sector. The data set is incomplete, with limited data for bags of 20 pence and above and as such there is a risk this change will not sufficiently positively impact consumer behaviour, as many already pay 20 pence and above for carrier bags.

BUSINESS ASSESSMENT (Option 4)

Direct Impact on business (Equivalent Annual) £m		
Costs: £483,242	Benefits: £0	Net: £483,242

Cross Border Issues (Option 4)

How does this option compare to other UK regions and to other EU Member States (particularly Republic of Ireland) Maximum 3 lines
 UK regions - Scotland have increased the levy to 10 pence from 01 April 2021, England are increasing the levy to 10 pence from May 2021 and Wales is considering their current policy. The Republic of Ireland currently charge 22 cents for plastic bags only, they have been considering an increase to 25 cents. EU Member States impose either bans (under 50 microns only) or levies.

Evidence Base

There is discretion for departments and organisations as to how to set out the evidence base. It is however desirable that the following points are covered:

- Problem under consideration;

Although there has been a reduction in total bags dispensed by retailers of 73.2% from the levy was introduced, the use of upper rate bags has steadily increased with the 2019/20 statistics showing an increase from the previous year of 27.6%; in 2019/20, for the first time more upper rate bags (52%) were dispensed than lower rate bags (48%). Similar trends have been experienced elsewhere in the UK with a report for the Welsh Assembly released on 17 December 2019 reaching a conclusion in respect of single use carrier bags (SUCBs) that: 'Based on the available evidence, 2018-19 was the year plastic Bags for Life (BfL) overtook plastic SUCBs as the most commonly issued bag type in Wales'ⁱ.

As the department's existing annual validated statistics only include bags priced at up to 20 pence (the threshold) a number of retailers have been pricing carrier bags at 20 pence and above, taking them outside the remit of the levy. As such they are not included in the department's annual statistics, resulting in the annual statistics not fully reflecting the overall bag usage throughout NI.

It is widely recognised that the heavy duty carrier bags currently in circulation and priced at above 5 pence are significantly more damaging to the environment and that such bags are not being reused sufficiently, rather they are the new throw away carrier bag, being used only once. There is also a perception by retailers and public that paper bags are more environmentally friendly, which is unproven, as detailed in the Biodegradable Bags Report 2015 conducted by the Department of the Environmentⁱⁱ and the Environmental Audit Committee publication found on www.parliament.ukⁱⁱⁱ.

Some of the exemptions contained within the existing legislation are now outdated, particularly as some have seldom / never been used and removal / amendment will simplify the legislation for retailers. The proposed amendments to the existing exemptions are not expected to have a significant impact however, it is important the associated issues are addressed as many were raised with Carrier Bag levy team staff during field-based operational interventions.

There is also little collected or anecdotal evidence to suggest that higher price, higher density, environmentally harmful upper rate bags are re-used on a regular basis and an increase in the levy and removal of the threshold is considered necessary to further decrease overall bag usage, thus reducing their harmful and negative environmental impact.

- Rationale for intervention;

An increase to the levy and removal of the threshold is considered necessary to better inform, influence and shape consumer and retailer behaviour, thus encouraging the reuse of carrier bags and reducing the number of bags in circulation. Removal of the threshold has been informed by retailer pricing points and significant changes in consumer behaviours. Pricing points in most of the large retailers has steadily risen over the last 5 years, and now matches the threshold of 20 pence or more making the threshold no longer relevant. The updating and simplification of the exemptions will simplify compliance for retailers.

Policy objective;

The primary policy objective is to further reduce the number of all carrier bags in circulation by removing the threshold and increasing the levy charge, thus enhancing the environment we all live in. Any carrier bag distributed, regardless of material, has an environmental impact and further reduction in the number of bags in circulation is necessary. An overarching aim of the policy is to encourage and educate everyone on the benefits of 'bringing and reusing your own bag'.

In addition, by removing some exemptions (bags on ships, trains, aircrafts, buses & restricted areas and gusseted liners) and simplifying others (removing and condensing various exempt bags into one size) the Regulations will be clearer and implementation simpler for retailers.

- Description of options considered (including do nothing), with reference to the evidence base to support the option selection;

Option 1 - Do nothing, continue with a 5 pence levy, retain the 20p threshold and keep all exemptions.

This is the current situation; all retailers would continue to charge the 5 pence levy for all bags dispensed (priced at 20 pence or less) and consumers would continue to have access to bags priced from 5 pence upwards. Annual statistics outline that although the number of lower rate bags dispensed has continued to decrease (down 36.7% from 18/19 to 19/20), the number of upper rate bags dispensed, which have a greater environmental impact, is increasing considerably (up by 27.6% from 18/19 to 19/20). Continuing with the current situation will not encourage consumer behavioural change.

Option 2 - Increase the levy to 10 pence, remove the threshold, amend and remove some exemptions.

With the removal of the threshold, this option will require all retailers to charge a 10 pence levy on ALL bags dispensed regardless of price. The increase of the levy to 10 pence is expected to reduce the total number of bags dispensed by 9%.

Consumers will have to pay a minimum of 10 pence for ALL bags regardless of price although many retailers already provide and promote carrier bags priced at and above 10p, which consumers have been content to pay for and total bag usage has remained unacceptably high with upper rate bags accounting for 52% of total bags dispensed in 19/20.

Some exemptions for various bag sizes are no longer considered relevant and amendments to the exempted categories will simplify for the Regulations for both consumers and retailers.

Option 3 - Increase the levy to 20 pence, remove the threshold, amend and remove some exemptions.

With the removal of the threshold, this option will require all retailers to charge a 20 pence levy on ALL bags dispensed regardless of price. The increase of the levy to 20 pence is expected to reduce the total number of bags dispensed even further than option 2 above, by 32%.

As outlined in option 2 many retailers provide and promote bags priced at 10 pence and above, but it is evident that many of the large supermarkets already have all bags which they dispense costing a minimum of 20 pence which many consumers continue to purchase.

Some exemptions for various bag sizes are no longer considered relevant and amendments to the exempted categories will simplify for the Regulations for both consumers and retailers.

Option 4 - Increase the levy to 25 pence, remove the threshold, amend and remove some exemptions.

With the removal of the threshold, this option will require all retailers to charge a 25 pence levy on ALL bags they dispense regardless of price. The increase of the levy to 25 pence is expected to reduce the total number of bags dispensed even further than the options above, by 39%.

As outlined in option 3 many of the large supermarkets already dispense bags at 20 pence which consumers continue to purchase, so it is expected that customer behaviour will change by increasing the levy above 20 pence.

Some exemptions for various bag sizes are no longer considered relevant and amendments to the exempted categories will simplify for the Regulations for both consumers and retailers.

- Monetised and non-monetised costs and benefits of each option (including administrative burden);

Option 1 - Do nothing, continue with a 5 pence levy, retain the 20p threshold and keep all exemptions.

This is the status quo option, with no monetised and non-monetised costs and benefits.

Option 2 - Increase the levy to 10 pence, remove the threshold, amend and remove some exemptions.

Costs to business = Additional Revenue for DAERA.

Increasing the price of carrier bags in store reduces the demand for the bags, however this reduced demand is not large enough to offset the price increase. Thus increasing the prices of carrier bags in-store will also increase revenue. It is estimated that for every 1% increase in the price of a carrier bag, demand will fall by 0.5%.

Average annual (recurring) costs:

Increasing the levy will therefore reduce demand from consumers and increase revenue to DAERA.

The additional revenue to DAERA can be seen as an 'opportunity cost' to businesses. That is, the additional revenue to DAERA (estimated for this option at £3.2m) could have been additional revenue to businesses, should they have increased the price of carrier bags in-store.

Total costs:

Given the review date of 2027, the total costs are the average annual (recurring) costs multiplied by 6 years, plus the transitional cost.

Transition Costs:

All stores in NI charge for carrier bags, however a small number of stores (estimated to be 24 stores) have always charged above the levy threshold and therefore have never set up their IT systems to account for the levy. For these stores, it is estimated that a manager will spend one hour adjusting their IT system. According to ASHE 2020 the median hourly rate of a retail manager is £14.25. Thus there will be a one-off transition cost within these stores of £342 (£14.25 x 24).

In order for staff to be familiar with the updated legislation, all stores will need to re-train staff. This one-off 'Learning cost' is estimated as £482,900 (calculated as one hour training x no. retail staff - £8.78 x 55,000). Staff and hourly rate data have been taken from ASHE 2020¹.

Costs to consumers:

Increasing the levy will increase the cost of a carrier bag to the consumer. As noted above however, a large portion of carrier bags already cost more than the levy. Thus, not all consumers will be impacted by the levy.

Available data suggests that a 10p levy will impact 35% of consumers. Based on the current number of transactions, increasing the levy to 10p will increase the price of an average transaction by 2p.

Option 3 - Increase the levy to 20 pence, remove the threshold, amend and remove some exemptions.

Costs to business = Additional Revenue for DAERA.

Increasing the price of carrier bags in store reduces the demand for the bags, however this reduced demand is not large enough to offset the price increase. Thus increasing the prices of carrier bags in-store will also increase revenue. It is estimated that for every 1% increase in the price of a carrier bag, demand will fall by 0.5%.

Average annual (recurring) costs:

Increasing the levy will therefore reduce demand from consumers and increase revenue to DAERA.

The additional revenue to DAERA can be seen as an 'opportunity cost' to businesses. That is, the additional revenue to DAERA (estimated for this option at £6.7m) could have been additional revenue to businesses, should they have increased the price of carrier bags in-store.

Total costs:

Given the review date of 2027, the total costs are the average annual (recurring) costs multiplied by 6 years, plus the transitional cost.

Transition Costs:

¹ [Industry, occupation, age, public/private sector and skill level | Northern Ireland Statistics and Research Agency \(nisra.gov.uk\)](https://www.nisra.gov.uk)

All stores in NI charge for carrier bags, however a small number of stores (estimated to be 24 stores) have always charged above the levy threshold and therefore have never set up their IT systems to account for the levy. For these stores, it is estimated that a manager will spend one hour adjusting their IT system. According to ASHE 2020 the median hourly rate of a retail manager is £14.25. Thus there will be a one-off transition cost within these stores of £342 ($£14.25 \times 24$). In order for staff to be familiar with the updated legislation, all stores will need to re-train staff. This one-off 'Learning cost' is estimated as £482,900 (calculated as one hour training x no. retail staff - $£8.78 \times 55,000$). Staff and hourly rate data have been taken from ASHE 2020.

Costs to consumers:

Increasing the levy will increase the cost of a carrier bag to the consumer. As noted above however, a large portion of carrier bags already cost more than the levy. Thus, not all consumers will be impacted by the levy

A 20p levy will impact 75% of consumers. A 20p levy will increase the average price of a transaction by 8p.

Option 4 - Increase the levy to 25 pence, remove the threshold, amend and remove some exemptions.

Costs to business = Additional Revenue for DAERA.

Increasing the price of carrier bags in store reduces the demand for the bags, however this reduced demand is not large enough to offset the price increase. Thus increasing the prices of carrier bags in-store will also increase revenue. It is estimated that for every 1% increase in the price of a carrier bag, demand will fall by 0.5%.

Average annual (recurring) costs:

Increasing the levy will therefore reduce demand from consumers and increase revenue to DAERA. The additional revenue to DAERA can be seen as an 'opportunity cost' to businesses. That is, the additional revenue to DAERA (estimated for this option at £7.9m) could have been additional revenue to businesses, should they have increased the price of carrier bags in-store.

Total costs:

Given the review date of 2027, the total costs are the average annual (recurring) costs multiplied by 6 years, plus the transitional cost.

Transition Costs:

All stores in NI charge for carrier bags, however a small number of stores (estimated to be 24 stores) have always charged above the levy threshold and therefore have never set up their IT systems to account for the levy. For these stores, it is estimated that a manager will spend one hour adjusting their IT system. According to ASHE 2020 the median hourly rate of a retail manager is £14.25. Thus there will be a one-off transition cost within these stores of £342 ($£14.25 \times 24$).

In order for staff to be familiar with the updated legislation, all stores will need to re-train staff. This one-off 'Learning cost' is estimated as £482,900 (calculated as one hour training x no. retail staff - $£8.78 \times 55,000$). Staff and hourly rate data have been taken from ASHE 2020.

Costs to consumers:

Increasing the levy will increase the cost of a carrier bag to the consumer. As noted above however, a large portion of carrier bags already cost more than the levy. Thus, not all consumers will be impacted by the levy

A 25p levy will impact virtually all consumers. A 25p levy will increase the average price of a transaction by 13p.

- Rationale and evidence that justify the level of analysis used in the RIA (proportionality approach);

In order to investigate the impact of any levy increase on the demand for carrier bags, a regression analysis was undertaken using statistics gathered by the department. This looked at the relationship between the demand for a carrier bag and the price faced in-store by the consumer. As larger stores will sell more carrier bags than smaller stores (due to footfall) the regression included a control for the market share of store.

The regression indicated that an increase in the price of a carrier bag will lead to reduced demand. These regression results were applied to available statistics in order to estimate carrier bag demand, given the levy's within each of the options (5p, 10p, 20p and 25p).

The table below summarises the results:

Option	Demand per Quarter	Percentage of original demand
Status Quo	17,991,322	100%
10p levy	16,322,047	91%
20p levy	12,281,960	68%
25p levy	10,986,581	61%

Estimations for the revenue generated by this levy were also included in the analysis. The table below summarises the results:

Option	Revenue Generated per Q	Percentage of original revenue
Status Quo	£899,566	100%
10p levy	£1,713,550	190%
20p levy	£2,580,488	287%
25p levy	£2,885,404	321%

The results indicate there is an inelastic relationship between the price of a carrier bag and the demand. Therefore an increase in the levy will simultaneously reduce carrier bag demand and increase revenue generated from the levy.

This increase in the levy will impact the consumers (who pay for the carrier bag) and the stores (many of whom, generate additional revenue by selling bags above the levy)

Using a weighted average of price and demand, it is estimated that the current average price paid by consumers for a carrier bag is 13 pence. Therefore as consumers, on average, pay over the levy, increasing the levy will not impact all consumers equally.

Using the available data, it is estimated that 65% of consumers already pay over 10p for a carrier bag and so will not be impacted by a 10p levy. Likewise 25% pay over 20p for a carrier bag, they will therefore not be impacted by a 20p levy.

Virtually all consumers however pay 25p or less for a bag.

The table below summarises how each proposed levy will impact the average price of a transaction:²

Option	Additional Spending per transaction
S.Q	0
10p	2p
20p	8p
25p	13p

The available data suggests that between Q2 2019/20 and Q1 2020/21, 30% of revenue generated by the sale of carrier bags went to Government. 70% went to the stores. Of the 70% that went to the stores, the majority (80%) went to the four largest stores (as measured by market share). The majority of small stores therefore made little additional revenue by charging beyond the levy and therefore will not be heavily impacted by increasing the levy.

² Calculated by calculating the current spend by price & estimating what spend would be if carrier bags (priced below the proposed levy) increased to the levy. Bags priced above the levy are unaffected and total demand remains the same. In reality, it is expected that demand will fall as a result of the increase in price, therefore the likely impact of the levy on consumers will be less. This estimation assumes that one bag is demanded per transaction (on average)

- Risks and assumptions;

Option 1:

It is assumed with option 1 that the status quo will remain the same, no change to current situation.

Options 2, 3 & 4:

It is assumed that a change to legislation will equate to a decrease in carrier bag circulation and the greater the levy, the less bags will be in circulation. Uncertainty surrounds shopping and high street trends also market structure post COVID 19, with online shopping having increased and several well-known high street retailers now removed from the marketplace.

Uncertainties exist around the types of bags and pricing points in the retail sector and it is not known if retailers will continue to supply the same types of bag if the levy increases. It is however, already known, of the top 10 retailers in NI, 7 now supply bags priced at above 10 pence, with the top 4 only supplying bags at 20 pence and above.

It is difficult to assess if consumers and retailers will be resistant to change however, with the trends in other UK jurisdictions now evident, NI retailers may now recognise that change is inevitable. Retailers have indicated to departmental officials that the 5 pence levy, while successful to date, is now accepted by consumers as a normal part of the shopping experience. Some retailers and environmental groups have suggested a significant increase is now necessary to further encourage the reuse of carrier bags.

Consumers may have a differing view, basically that they are paying the levy as a way to counteract any guilt about damage to the environment versus convenience of not bringing a bag for each shopping experience. In this case, 5 pence has become the price worth paying to assuage any guilt, and a higher price may also be worth paying. With limited data available for bags priced 20 pence and above there is a risk that options 2 and 3 will not sufficiently or positively impact consumer behaviour, as many already pay 20 pence and above for carrier bags without knowing that none of this money funds environmental causes in NI.

There is also a risk that environmental groups will argue the levy, even at 25 pence, is insufficient to positively impact and refocus consumer behaviours, given the already existing pricing point of 20 pence and above for all bags by many of the large NI retailers.

- Direct costs and benefits to business;

Direct costs to businesses is limited to the transitional cost, best estimate of which is £483,242 for a one year period. The estimated benefit to businesses is nil. The additional revenue to DAERA can be seen as an 'opportunity cost' to businesses. That is, the additional revenue to DAERA could have been additional revenue to businesses, should they have increased the price of carrier bags in-store.

- Wider impacts (in the context of other Impact Assessments in Policy Toolkit Workbook 4, economic assessment and NIGEAE)

The monetised costs and benefits have been discussed above, but there are then the wider societal impacts, which include a greater awareness by everyone in NI of the environment overall and our world renowned natural resources. The NI Assembly work primarily for everyone in NI but also must consider the wider policy agendas encompassing global environmental concerns and encourage members of the public and businesses of NI to 'Act locally but, think globally'.

The environmental benefits of a reduction in carrier bag usage feeds into a reduction in waste management, reduced litter on our streets and in our oceans, improved air quality, green growth, resource efficiency and a circular economy. The Carrier Bag Levy in NI leads the way within the UK and any legislative change must deliver continued improvement, consumer awareness and positive behavioural change in protecting our environment.

The existing Carrier Bag Levy legislation in NI is very clear, in that it has been agreed and ratified by HM Treasury that all proceeds and revenue from the levy must be used to fund environmental projects across NI. NI is the only UK jurisdiction with these arrangements in place and the reinvestment of levy proceeds

is benefiting everyone particularly as what is good for the environment is good for the economy in the long term.

ⁱ [The Sale and Use of Carrier Bags in Wales \(gov.wales\)](#)

ⁱⁱ <https://www.daera-ni.gov.uk/sites/default/files/publications/dae/corporate-report-biodegradable-carrier-bags-2015.pdf>

ⁱⁱⁱ [House of Commons - Plastic bags - Environmental Audit Committee \(parliament.uk\)](#)