

Dadansoddi ar gyfer Polisi



Analysis for Policy



Llywodraeth Cymru
Welsh Government

SOCIAL RESEARCH NUMBER:
60/2019
PUBLICATION DATE:
17/12/2019

The Sale and Use of Carrier Bags in Wales

Mae'r ddogfen yma hefyd ar gael yn Gymraeg.
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Title: The sale and use of carrier bags in Wales

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Full Research Report: Winning Moves, Icaro Consulting (2019). *The Sale and Use of Carrier Bags in Wales*. Cardiff: Welsh Government, GSR report number 60/2019
Available at: <https://gov.wales/research-sale-and-use-carrier-bags-wales>

Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government

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Glossary

Acronym / key word	Definition
BfL	Reusable thick <u>plastic</u> Bag for Life that is replaced free of charge by the retailer and, at the time of writing, normally retails between 5p to 10p.
Defra	Department of Environment, Food and Rural Affairs
EIA	Environmental Investigation Agency
ONS	Office for National Statistics
PIR	Post-implementation Review. The abbreviation PIR is used throughout the report to refer to the Post-implementation Review of the Single Use Carrier Bag Charge in Wales, 2016.
Reusable bag	Reusable bag (made from fabrics such as canvas, woven synthetic fibres, or a thick plastic) that is more durable than disposable plastic bags, allowing multiple use. The Regulations specify that bags that are reusable are those greater than 49 microns thickness with both dimensions (height and width) being over 404 mm, and one dimension being over 439 mm. Bags falling outside these specifications are subject to the charge. Bags for Life are one type of reusable bag.
SIC	Standard Industrial Classification
SUCBs	Single-use Carrier Bags (plastic, paper, biodegradable / starch). A single use carrier bag is any bag which, although it may be used more than once, is not specifically designed for multiple re-use and is not replaced for free by the retailer, when worn out. Bags that are made wholly from paper and have maximum dimensions of 175 mm (width) x 260 mm (height), and do not have a gusset or handle, are exempt from the charge.
Very lightweight plastic bags	Thin plastic bags, typically used for unwrapped or loose food items, such as fruit and vegetables, seeds or medicines.
WRAP	Waste and Resources Action Programme

Reporting conventions

All carrier bag estimates presented in this report, unless otherwise specified, are based on weighted data, extrapolated to allow overall conclusions to be drawn for Wales as a whole. Where figures presented in tables do not sum (carrier bag estimates and percentages), this is due to rounding.

1. Introduction

Background

- 1.1 Wales was the first country in the UK to introduce a single use carrier bag (SUCB) charge in order to reduce consumption and the associated environmental impacts of SUCB production, use and disposal.
- 1.2 The Single Use Carrier Bags Charge (Wales) Regulations 2010,¹ require all persons who sell goods in Wales or for delivery to persons in Wales (sellers) to charge a minimum of 5p for each SUCB issued. The charge is levied at the point of sale and applies both in store and via distance selling methods.
- 1.3 Sellers with ten or more employees are required to keep records of the number of chargeable SUCBs sold, the net proceeds from the sale (after the deduction of VAT and reasonable costs) and information about what has been done with the proceeds. There is no requirement, at present, for sellers to report to the Welsh Government on the number of carrier bags they issue in Wales each year, though VAT-registered businesses supplying more than one thousand chargeable SUCBs in a year are required to publish details on their websites or in store.
- 1.4 A Post-implementation Review² (PIR) was published in 2016 as an early assessment of the impact of the SUCB charge. The review examined trends in demand for SUCBs and for various types of other shopping bags (e.g. Bags for Life (BfL), paper carrier bags, jute bags, cotton bags, etc.) from 2011-15, as well as examining the projected environmental and economic costs and benefits. The review also examined the attitudes and behaviours of retailers and consumers in response to the 5p charge on SUCBs.
- 1.5 Results from the PIR indicated a significant (71%) reduction in the number of SUCBs supplied in Wales between 2011 and 2014, along with encouraging positive impacts on consumers (reported increased own bag use, and widespread support for the charge to continue). Moreover, the review estimated that the net benefit of the SUCB charge was between £27.9m and £32.3m, as a result of reduced

¹ For full details, please refer to [The Single Use Carrier Bags Charge \(Wales\) Regulations 2010](#).

² For further information, please refer to [the Post-implementation Review of the Single Use Carrier Bag Charge in Wales](#) (2016), published on the Welsh Government's website.

environmental costs and increased social benefits via charity donations for the period October 2011 to January 2015.

- 1.6 Although the PIR demonstrated clear benefits associated with the SUCB charge, there is growing concern from the Welsh Government, and wider stakeholders such as environmental groups, that low cost plastic BfL, marketed as reusable alternatives, are becoming an issue. Of particular concern is the potential risk that many consumers have started to treat these types of plastic bags as a 'throw-away bag' and are discarding them prematurely. This "substitution effect" is likely to have significant adverse environmental impacts if these types of bags are disposed of inappropriately, as such bags are typically made of heavier gauge materials and take longer to degrade. Given businesses are not required to report on the number of reusable bags sold in any part of Great Britain, it is currently unclear to what extent reusable bags are being used and discarded prematurely by consumers.
- 1.7 The Environment (Wales) Act 2016 contains two provisions with respect to the SUCB charge. First, the Act placed a new duty on sellers to donate net proceeds of the SUCB charge to charitable purposes that relate to environmental protection or improvement, and directly or indirectly benefit the whole or any part of Wales. However, there is an exception for sellers who have existing arrangements where they are donating their proceeds to non-environmental related good causes, such as health or childrens' charities, if they give notice that they intend to continue with these arrangements. Second, a provision was included to extend Welsh Ministers' powers to enable a minimum charge to be set for other types of carrier bag, e.g. BfL. At the time of writing, the Welsh Government has yet to commence the new duty and is gathering evidence to determine whether further action is needed to reduce the environmental impacts of carrier bags.

Aims and objectives of this research

- 1.8 The overarching aim of the research was to provide the Welsh Government with up-to-date data on bag usage in Wales, and an understanding of current retailer and consumer attitudes and behaviour in response to the SUCB charge.
- 1.9 The specific objectives and research questions of this study were to:

- Examine the current effects of the charge on the use of carrier bags in Wales, e.g. on areas such as sales of different types of bag supplied at ‘point of sale’, and examine the impact of the SUCB charge on the supply of bag types that are not covered by the current regulations, in particular plastic BfL;
- Examine the impact the SUCB charge has had on retailers in Wales and their attitudes and behaviours in relation to SUCBs and BfL;
- Measure the longer-term trends in the use of SUCBs and BfL, including estimates for the sale and use of different types of carrier bags across the Welsh retail sector;
- To investigate the types of bags being used in place of SUCBs, that is, any substitution effects between SUCBs and other reusable bags, particularly BfL;
- Ascertain the current effects of the charge on consumer acceptance, consumer understanding and consumer behaviour about the use of different types of carrier bags and, in particular, plastic BfL.

1.10 The Welsh Government is also required to report to the EU on the number of very lightweight bags being supplied in Wales, so it was agreed this research would also attempt to quantify the number of very lightweight bags issued between 2015-18.

1.11 The findings will be used to help with the monitoring of current policy, and to identify whether further government action is needed on carrier bags.

Structure of the report

1.12 The remainder of the report is structured into four sections:

- **Section 2 provides a detailed overview of the methodology adopted in the research**, covering the quantitative research conducted with retailers operating in Wales, and qualitative research conducted with consumers.
- **Section 3 details insights from the quantitative research with retailers**, including estimates of the total number and types of bags issued since 2015-16 (when the PIR was completed) as well as current business attitudes towards various aspects of policy and regulation surrounding SUCBs.

- **Section 4 summarises the findings from the qualitative research conducted with consumers**, including attitudes to the charge, and how these have changed over time, understanding and awareness of the charge, bag use and disposal behaviour, and attitudes towards any changes to the charge that may be introduced in the future.
- **Section 5 presents the conclusions of the research** and considers the implications of these for the Welsh Government.

1.13 The main body of the report is followed by a set of annexes that provide additional methodological detail, referenced in Sections 2 and 3.

2. Methodology

2.1 The research was divided into two workstreams:

- A. **Quantitative research with retailers and takeaways**, to determine how many bags have been issued since the PIR was completed in 2015-16, and understand current attitudes and behaviour relating to carrier bags.
- B. **Qualitative research with consumers**, to understand citizen attitudes and behaviour with regard to carrier bags.

2.2 This section provides an overview of the approach adopted in each workstream, along with references to where further details can be found in Annexes A to H.

A. Quantitative research with retailers in Wales

(i) Overview

2.3 The quantitative findings in this report are based on a survey of retailers in Wales, targeting both small and large businesses. Fieldwork was conducted in early 2019 to allow figures to be provided for the calendar year 2018, as well as for the financial years 2015-16, 2016-17, 2017-18 (1st April to 31st March) – referred to as the ‘period of interest’ throughout the report.

2.4 To ensure comparability with the PIR, the sample frame consisted of all businesses in Division 47 (Retail) of the UK Standard Industrial Classification of Economic Activities (SIC) 2007, and takeaway food retailers in SIC 2007 Code 56.10/3.

2.5 Consistent with the PIR survey, the sample frame was obtained from Experian.³ Using the information supplied by Experian, the sample frame was further disaggregated by number of employees (split between small and medium-sized enterprises (SMEs) and large businesses) and region, as this was the basis on which target numbers of interviews were defined in the PIR survey. SMEs were defined as businesses with fewer than 250 employees, and large businesses as those with 250 or more employees, with the population being split into four regions, based on the definitions used in the PIR (as detailed below).

³ Experian’s database was used as the sample frame for the survey of businesses conducted during the post-implementation review.

2.6 The majority of retailers and takeaways were SMEs, and the majority of these had ten or fewer employees in 2018, as illustrated in Table 2.1, below. However, there were also a large number of sites in Wales (more than 3,000) operated by large businesses with 250+ employees.

Table 2.1 Population of business sites in SIC code 47 (Retail) plus takeaway businesses in Wales, 2018 data

Region ⁴	Population of business sites by number of employees (Experian categorisation)			Total
	1 to 10	11 to 249	250+	
North Wales ⁵	1,997	540	644	3,181
Mid & West Wales ⁶	1,795	367	495	2,657
South West Wales ⁷	2,399	670	810	3,879
South East Wales ⁸	2,749	752	1,100	4,601
TOTAL	8,940	2,329	3,049	14,318

Source: Experian counts for UK SIC Division 47 and 56.10/3, split by regions used in the PIR

2.7 Whilst the PIR did not exclude large businesses from the survey deliberately, it was largely unsuccessful in securing interviews with large businesses. This is unsurprising, given large businesses accounted for a small percentage of the business population and carrier bags were generally dealt with by head office. In building on the approach used in the PIR, it was agreed with the Welsh Government that large retailers with 250 or more employees should be treated as a separate group for sampling purposes and approached separately in this Study. This was on the basis that:

- a) **Large businesses tend to deal with carrier bag monitoring at head office level.** This was evident in both the survey conducted during the PIR and from piloting in preparation for the main stage fieldwork in this research.

⁴ Regional definitions used in the PIR were replicated to maintain comparability.

⁵ North Wales: Anglesey, Conwy, Denbighshire, Flintshire, Gwynedd, Wrexham.

⁶ Mid & West Wales: Carmarthenshire, Ceredigion, Pembrokeshire, Powys.

⁷ South West Wales: Swansea, Neath Port Talbot, Bridgend, The Vale of Glamorgan, Rhondda Cynon Taff.

⁸ South East Wales: Blaenau Gwent, Caerphilly, Cardiff, Merthyr Tydfil, Monmouthshire, Newport, Torfaen.

b) **Large businesses, supermarkets in particular, will have issued a very large number of SUCBs during the period of interest (2015-18)**, as well as being a key group of interest in relation to other bag types (e.g. BfL). Encouraging the participation of large businesses would therefore result in a greater level of confidence in the final estimates.

- 2.8 The database provided by Experian was reviewed to separate out all sites associated with large businesses. The database was further processed to select single site retailers and head offices only, to avoid interviewing multiple branches where smaller retailers operated in a chain. The processed database was then used as the basis for sampling.
- 2.9 The survey was costed on the basis of replicating the single survey approach adopted in the PIR and achieving 500 interviews in total. However, following agreement with the Welsh Government to treat large businesses as a separate group for sampling purposes, it was agreed that the survey should consist of 400-450 interviews with SMEs only, with the remaining resources being used to contact and secure responses from large businesses.
- 2.10 Subsequent piloting confirmed, as anticipated, that securing interviews with large businesses, in the absence of pre-existing contact information, was challenging and considerably more resource intensive per business when compared with SMEs. A provisional target of 50 interviews with large businesses was agreed with the Welsh Government, with the caveat that this may not be achievable and should be monitored and discussed during the fieldwork process.
- 2.11 A further issue identified prior to the main stage of fieldwork was that many businesses in SIC Division 47 did not issue any bags at all, with some never having done so due to the nature of their business (e.g. carpet retailers). It was agreed with the Welsh Government that the 400-450 interviews with SME retailers should be completed with those issuing carrier bags. This required the research team to screen out businesses that did not issue any carrier bags at all in the period of interest.

ii) Quantitative research with large businesses (250 employees or more)

a) *Capturing the numbers of bags issued by large businesses in Wales*

- 2.12 For large businesses, a spreadsheet was developed to request and capture the number of bags issued, covering the different bag types of interest to the Welsh Government. This was emailed to businesses, asking for a response in advance of calling them to cover the remainder of the survey questions. Materials used to approach large businesses can be found in Annex F and Annex G.
- 2.13 A total of 276 large retailers operating in Wales were contacted by telephone and/or email during the fieldwork period. Most initial contact with large retailers was made via switchboards, as the relevant person dealing with carrier bag monitoring in each organisation was not known to the Welsh Government. Unfortunately, with large business switchboards operating increasingly on the basis of no name policies (i.e. refusing to put anyone through that doesn't have a contact name), initial efforts often proved fruitless. The person on the switchboard was often unwilling or unable to transfer the call and offered only a generic email address. Where emails and follow-ups were sent to such addresses, very few responses were received.
- 2.14 Analysis of carrier bag data submitted to Defra for bags issued in England⁹ indicated that the top ten supermarkets¹⁰ were responsible for more than 70% of the total number of plastic SUCBs issued by all large retailers with 250 or more employees (2016-17 and 2017-18 data). In light of this, and an expectation that the top ten supermarkets would likely account for an even greater percentage of plastic BfL, the decision was taken at the fieldwork mid-point to use the remaining time available to secure as many responses from the top ten supermarkets as possible.
- 2.15 Approaching contacts known to Winning Moves, and with support from WRAP, Winning Moves was able to secure responses on plastic SUCB numbers for Wales from six of the top ten supermarkets. This consisted of direct responses from four large supermarkets, with data for a further two supermarkets being sourced from reports available in the public domain.

⁹ See [Single-use plastic carrier bags charge: data in England for 2017 to 2018](#).

¹⁰ Aldi, Tesco, Sainsbury, Asda, Iceland, Lidl, Waitrose, Morrisons, Co-op and Marks & Spencer.

- 2.16 Another of the top ten supermarkets gave an initial indication they would be willing to share data with us but did not supply data.
- 2.17 Responses to the survey were received from 11 large businesses in total during the fieldwork period, including the four large supermarkets providing direct responses.

b) Estimating the numbers of plastic SUCBs issued by large businesses in Wales

Overall approach

- 2.18 The number of plastic SUCBs issued for the period 2015-18 was estimated for the four supermarkets for which we did not receive data. Estimates were made on the assumption that the four supermarkets' overall share of plastic SUCBs issued in Wales would be approximately the same as their share of plastic SUCBs issued in England in the corresponding year. Despite the possible limitations of this approach, it was considered to be the most robust option available to provide a ballpark estimate.¹¹
- 2.19 The approach adopted to estimate the number of plastic SUCBs issued by large businesses is described in more detail in Annex C, along with details for BfL and very lightweight bags.

Building a time series for 2011-18

- 2.20 A key objective of this Study was to measure longer-term trends in the number of plastic SUCBs issued, including exploring any change since the PIR. For this reason, we sought to make sure the methodology used in the current study was as consistent as possible with the approach used in the PIR (the 'PIR method'). This included using the same population definition, sample frame, sampling categories and data collection method.
- 2.21 The method used in this Study (the '2019 method') did differ, however, in its approach to estimating the number of plastic SUCBs issued by large businesses.

¹¹ Having established a lack of correlation between share of plastic SUCBs and market share in England and given a lack of data on store size variability to produce estimates based on the number of sites operated by the top ten supermarkets. See Annex C for further details.

- 2.22 The only information available at the time of the PIR to allow estimation of the number of plastic SUCBs issued by large supermarkets in Wales was that reported to the WRAP on a voluntary basis. Seven of the ten largest supermarket chains operating in Wales reported to WRAP at the time (Asda, Marks & Spencer's, Sainsbury, Tesco, The Co-operative Group, Waitrose and Morrisons). However, no data was available for Aldi, Iceland and Lidl. With insufficient information available at the time to estimate the number of plastic SUCBs issued by the three missing supermarkets, the authors of the PIR noted this exclusion as a limitation and explained this would result in slight under-estimation of the total number of bags.¹²
- 2.23 Limitations of the 'PIR method' were addressed in this Study by sourcing data directly from large supermarkets and using Defra data for England, not available at the time of the PIR, to inform the estimation process. However, doing so introduced methodological differences compared with the PIR that needed to be addressed prior to producing a time series for 2011-18.
- 2.24 To address the methodological differences, it was agreed with the Welsh Government to produce two time series for plastic SUCBs issued in Wales in 2011-18. First, by using the 'PIR method' to estimate the number of plastic SUCBs issued annually for the full period 2011-18; and second, by using the '2019 method' to do the same, updating estimates for the period covered by the PIR (2011-14) to include estimates for Aldi, Iceland and Lidl.
- 2.25 The analyses conducted to produce separate time series estimates for plastic SUCBs issued in 2011-18 using the 'PIR method' and '2019 method' are described in Annex C.

c) Estimating the number of BfL issued by large businesses in Wales

- 2.26 Despite large supermarkets being willing to provide information about SUCBs, it was difficult to obtain figures on BfL. This was unsurprising, given the collection and reporting of data on BfL is not a legal requirement at present, but does make it more difficult to provide robust estimates of the number of BfL issued in Wales. Actual

¹² The under-estimation is acknowledged in [paragraph 4.32 of the full PIR report](#).

data on BfL for the entire time period under consideration was received for only two of the ten large supermarkets.

- 2.27 It is possible that unwillingness to provide data on BfL contributed to non-participation in the research in some cases, though we cannot be certain as the supermarkets in question generally provided 'no comment' at all following the initial requests.
- 2.28 To provide estimates of the number of BfL being issued in Wales, the research team used data compiled by the Environmental Investigation Agency (EIA) and Greenpeace in 2018, covering the number of BfL issued across the UK.¹³ The EIA data available for the UK are partial, as not all supermarkets responded to the EIA on the number of BfL they issued. Furthermore, only one set of annual figures was requested by the EIA (covering the financial year 2017-18) thus estimation was only possible for 2017-2018. However, this, in conjunction with the responses received during fieldwork, was the best data available for producing an overall estimate for Wales.
- 2.29 Estimations were made for supermarkets not responding to the survey by assuming their contribution to the number of BfL issued in Wales was equivalent to that of their share of BfL issued across the UK, based on the EIA data. Further details about the calculation approach are provided in Annex C.
- 2.30 Unfortunately, the paucity of data for plastic BfL and other reusable bag types prohibits rigorous analysis of substitution effects between SUCBs and reusable bags (i.e. the number and type of reusable bags used in place of SUCBs and the net environmental impact).
- 2.31 This report also does not provide estimates of the numbers of bags issued by large businesses for other bag types, as it had set out to do initially, due to the paucity of publicly available data. These include paper SUCBs, biodegradable SUCBs, and reusable fabric bags. The exception is very lightweight bags, of the variety used for fruit and vegetables, where an approximate estimate was made on the basis of responses to the survey conducted in this Study, combined with EIA data for the UK

¹³ Environmental Investigation Agency (EIA) and Greenpeace, [Checking out on Plastics](#) (2018).

and estimated percentage issued in Wales. Annex C provides further details regarding the estimation process.

ii) Quantitative research with SMEs (fewer than 250 employees)

2.32 To maintain comparability with the PIR, quotas for the SME survey target sample were specified based on region and number of employees, as shown in Table 2.2. The target distribution was designed to reflect the overall profile of the population according to Experian data.

Table 2.2 Targeted sample quotas for quantitative survey of SME retailers¹⁴

Region ¹⁵	Employees		Total	Total (%)
	1-10	11-249		
North Wales	69	19	88	22%
Mid & West Wales	64	12	76	19%
South West Wales	83	25	108	27%
South East Wales	96	32	128	32%
Total	312	88	400	100%

2.33 For SMEs, data collection consisted of telephone interviews with business owners or people within the business best suited to provide information on bags issued. For businesses with multiple sites, the head offices were targeted to provide information covering all of their outlets in Wales.

2.34 Two fieldwork pilots were undertaken to test the research methodology and the research tools. A copy of the survey questionnaire is included in Annex E.

2.35 Based on findings from the pilot period, subsectors SIC code 47.91 'Retail sale via mail order houses or via Internet' and SIC 47.53 'Retail sale of carpets, rugs, wall and floor coverings in specialised stores' were removed from the sample for the main phase of fieldwork as no respondents in these categories reported issuing bags.

2.36 The pilots showed that approximately 50% of SMEs in the selected SIC codes did not issue bags at all and had never done so.¹⁶ Thus, the target number of interviews

¹⁴ All SMEs under SIC code 47 (minus SIC codes 47.91 and 47.53) and SIC 56.10/3

¹⁵ Regional categorisation based on PIR categorisation and defined as above in Table 2.1

¹⁶ Usually because of the nature of their business, e.g. retail of large goods which would not fit in a carrier bag.

was redefined as the number of businesses who issued bags, with a screening component being introduced to the interview to identify whether bags were issued by the retailer or not. The outcome of the screening exercise (i.e. the fact that some SMEs issued no bags in the period of interest) was taken into account during analysis for estimates of the total number of bags issued.

2.37 For all businesses, respondents were asked to provide information on the actual number of bags issued across the following dates:

- April 2015 to March 2016;
- April 2016 to March 2017;
- April 2017 to March 2018; and
- January 2018 to December 2018.

2.38 Two approaches were used in soliciting data on numbers of bags issued by SME retailers to enhance the accuracy of data capture:

- Respondents were asked to provide annual estimates for each bag type they issued corresponding to the respective years/period they had been in operation. About 80% of businesses who issued bags provided estimates based on this approach.
- The approximately 15% of businesses who were unable to provide annual estimates were asked to provide an estimate of how many bags they issued in either a typical week or month in a typical year.

2.39 Respondents were given the option to answer the survey in either Welsh or English. One interview was conducted in Welsh.

2.40 A total of 890 SME retailers were interviewed in the SME survey. Out of these 890 retailers, 440 (49%) reported not issuing bags at all in the period of interest. This was similar to findings previously reported from the pilot stage. Businesses who did not issue bags (440) were asked why they did not, whether they had previously issued bags, and if so, when they stopped issuing bags.

2.41 Those SMEs that did issue bags in the period of interest (450) were asked the full questionnaire detailed in Annex E. Of the 450 retailers who reported they did issue

bags in the period of interest, only two SMEs no longer issued bags, with both reporting having stopped in 2016.

2.42 Out of the total sample of 890 SME retailers interviewed, 24% were located in the ‘North’ region, 23% in the ‘Mid and West’ region, 28% in the ‘South West’ region and 25% in the ‘South East’ region, using definitions adopted in the PIR.

2.43 As shown in Table 2.3, the sample of 450 SMEs issuing bags in the period of interest (and so interviewed in full) was fairly representative of the ‘North’ and ‘South West’ regions. However, the ‘Mid and West’ region was over-represented, and the ‘South East’ region was under-represented, stemming from the practical challenges of managing a large number of interviewers on simultaneous calls, where both willingness to respond and eligibility (whether they issued bags) were unknown prior to screening.

Table 2.3 Regional breakdown of SME retailers interviewed during quantitative data collection

Region	Total Number of SMEs interviewed	Number of SMEs not issuing bags	Number of SMEs issuing bags	Achieved sample for SMEs issuing bags (%)	Proposed quotas for SMEs issuing bags (%)
North	213	108	105	23%	22%
Mid and West	208	103	105	23%	19%
South West	249	125	124	28%	27%
South East	220	104	116	26%	32%
Total	890	440	450	100%	100%

2.44 A break-down of SMEs responding to the survey by SIC code is provided in Annex A.

2.45 Weights were applied during analysis to adjust for the regional and SIC code bias in our achieved sample to ensure estimates reflected the population profile of SME retailers in Wales. Weights were calculated on the basis of the number of businesses in the population (N) divided by the number of businesses interviewed (n), with population data being obtained from Experian.

2.46 Business population estimates¹⁷ published by ONS were cross-referenced to confirm Experian had good coverage of the population in general. However, ONS

¹⁷ [Business Population Estimates](#) (2018).

data could not be used for weighting as the published information did not provide sufficient granularity by SIC code. Details about the weighting calculation for the SME survey are provided in Annex C, with the weights used in the analysis included in Annex D.

B. Qualitative research with consumers: online discussion board

i) Overall approach

2.47 The qualitative research with consumers was conducted using an online discussion board, consisting of multiple tasks undertaken across a seven-day period. This choice was based on a judgement that consumers have a highly individual and nuanced approach to their use of shopping bags – from the types of bags they have through to how and when they use them and, finally, how they dispose of them.

2.48 Therefore, rather than holding the discussions in a group setting (where it is more difficult to discern individual habits and routines), an online method was felt to be better equipped to look both at individual behaviours and attitudes to the charge. The research topics were as follows:

- i. Attitudes to the charge, and how these have changed over time;
- ii. Understanding and awareness of the charge, including:
 - the purpose of the charge;
 - the environmental benefits of the charge;
 - the concept of reusable bags and bags for life;
 - that fact BfL can be replaced for free;
 - what bags are covered by the charge;
 - whether SUCBs are still available in Wales;
 - how the monies generated by the charge are distributed, and the fact the BfL charge does not go to charity; and
 - awareness of not being charged for SUCBs.

- iii. Bag use and disposal behaviour; and
- iv. Attitudes towards any changes to the charge that may be introduced in the future – including:
 - o Whether consumers would support an extension of the charge from SUCBs to BfL; and
 - o Whether consumers would support an increase in the charge (e.g. have they got used to paying the 5p charge, rendering it ineffective as a deterrent; what level of increase did they think would encourage them to reuse bags rather than buy new ones?).

2.49 A discussion guide was developed to address the research topics (provided in full in Annex H), consisting of a series of questions and tasks. The majority of these (approximately three quarters), and in particular the first series of tasks, were designed to stimulate one-to-one in-depth discussions (e.g. to explore respondents' individual habits and understanding of the charge, unaffected by the comments of others). Later questions (representing around a quarter of the overall questions) were asked of the group as a whole and were designed to explore participants' awareness and understanding of current and future policy; for example, to discuss whether consumers would support an extension to the charge to other single use plastics or an increase in the charge.

2.50 An additional benefit of the online discussion board method was flexibility for respondents – they were able to log on and answer questions when it was convenient for them across the seven-day study period. This also allowed research questions to be staggered across the week in four 'batches'. This approach was, in part, to manage the responses across the week (e.g. to ensure that all respondents were at the same point, and that they answered follow up prompts to previous sections before moving on to new questions). It was also to understand existing shopping/bag use routines and behaviours early on, before specific mention of single use carrier bags or the charge.

2.51 The online discussion board was conducted from 22-29 October 2018. The tasks took respondents around 2-2.5 hours in total, and respondents were paid £60 for their time.

ii) Sampling and recruitment

2.52 Recruitment was undertaken face-to-face by recruiters working across eight locations in Wales, selected to provide: (a) pan-Wales representation; (b) a range of cities and smaller towns, and (c) the likelihood of finding both English and Welsh speakers. Five respondents were recruited (i.e. 40 in total) from each of the following locations:

- Denbigh
- Swansea
- Llanelli
- Caernarfon
- Anglesey
- Aberystwyth
- Cardiff
- Caerphilly

2.53 Recruiters approached individuals in locations of high footfall (e.g. outside shopping centres or high streets) and across a range of times (e.g. office hours as well as lunch time, evenings and weekends) to ensure that a range of different people were approached. Recruitment was conducted according to a standardised questionnaire that contained a number of screening and quota questions, as follows:

- Screening questions were designed to exclude anyone who had attended a focus group within six months of the recruitment date, plus people working in certain fields (e.g. journalism, PR, councillors). Furthermore, all respondents had to have a degree of responsibility in the home for shopping for food or non-food products.
- Quota questions were designed to ensure a sample split according to three key factors: age (18-34 years; 35-54 years and 55+ years), geography (the eight locations outlined above), and type of food shopper (i.e. those who tend to buy little and often (sometimes called “top up” shoppers) and those who tend more towards a main weekly shop).

2.54 On the assumption that there would be some attrition between the face-to-face recruitment and participation online, a total of 40 respondents were recruited across Wales with the expectation that there would be a drop off rate of approximately 10%. In practice, 34 respondents successfully completed all the tasks.

iii) Discussion board design and limitations

- 2.55 Participation was offered on an equal basis in English and Welsh, using recruiters who were able to converse in both English and Welsh. Eight of the 34 respondents chose to complete the discussion board in Welsh.
- 2.56 Two moderators worked on the project – an English-speaking moderator and a bilingual moderator, working with the Welsh speakers. In practical terms, this meant there were two online discussions taking place in parallel – both guided by the same set of tasks. While there was no direct interaction between the English and Welsh-speaking respondents, there was crossover via the moderators who convened daily to review progress and discuss the key points being raised. Any key questions raised in the English-speaking forum were then asked in the Welsh-speaking forum (and vice versa).
- 2.57 As part of the decision to use the less traditional method of an online discussion board, monitoring was put in place to review how it affected consumers' ability to engage with the research. During recruitment, monitoring focused on the number and type of people who initially agreed, in principle, to participate, but refused once they learned the study used an online method. In particular, the monitoring was used to assess whether the choice of method excluded respondents on the basis of their socio-economic status and/or level of digital inclusion / digital confidence. Seven individuals refused to participate as a result of the online methodology, all of whom did have lower socio-economic status (three classified in social class C2 and four in social class DE) and lower digital confidence. However, in overall terms this accounted for a very small proportion (5%) of the total number of refusals to participate in the research. This indicates the methodology does slightly bias against those with lower levels of digital confidence, though the use of an online discussion board was not a significant barrier to participation.
- 2.58 The majority of the questions and tasks were pre-defined and standardised in the discussion guide. The exception was the follow up prompts, which were a mixture of some that were pre-defined in advance and others that developed naturally in the course of the interaction between moderator and respondent(s) (in much the same way as a face-to-face conversation would develop naturally). Some of these ad hoc prompts were to elicit more detail (e.g. 'that's very interesting – could you tell me a little more why you think that?'), whereas in other cases they were used to test

reactions to other perspectives given by other respondents (e.g. 'one of the other respondents raised an issue – what do you think about this?').

- 2.59 The moderators checked responses several times a day for every day the board was live, to ask follow-up questions on areas of interest and prompt respondents for more detailed answers. The moderators also convened daily to discuss the key points that had been raised and agree any new standardised follow-up prompts that should be asked of all respondents.
- 2.60 Three types of research construct were used:
- a) open-ended questions requiring type-written responses;
 - b) respondent tasks, such as taking photos of the shopping bags they used for their most recent shop (and being asked to describe them i.e. give them a label e.g. 'bag for life'); and
 - c) a series of 'Quick Polls', requiring the respondent to choose from a set of pre-defined 'tick box' responses. 'Quick Polls' were only used as a device to elicit headline reactions, and were always followed up with additional, open-ended questions to understand responses in more detail.
- 2.61 Irrespective of which of the above constructs was used in the discussions, in all cases the data generated is **qualitative** and it is therefore not appropriate to report percentages as might be done when reporting quantitative survey findings. When reporting the Quick Polls, the number of respondents giving each answer is reported, but purely as a shorthand means of indicating the spread of opinion within the sample - it is important to note that these numbers should not be used in a statistical sense i.e. to make generalisations or statistical inferences about the likely views or behaviour of the wider population of Wales.
- 2.62 The method is qualitative, and therefore based on a relatively small sample. This means it is not possible to report definitive trends by, for example, age group or gender. Any commentary that follows about any perceived variations by age group should be treated as indicative only. The purpose, and strength, of qualitative research is the depth of understanding it provides – it is designed to answer questions like 'why' and 'how' rather than 'how many'.

3. Retailer attitudes and behaviour (quantitative research)

Introduction

3.1 This section provides a summary of findings from the survey of retailers operating in Wales, including estimates of the number of carrier bags issued in Wales in 2015-18 produced using the estimation methods described in Section 2 and Annex C.

3.2 It is split into five sub-sections:

i) Number and type of bags issued in Wales (2015-18): overall estimates

The first sub-section presents overall estimates for Wales, insofar as possible given the available data, combining the results for large businesses and SMEs. This includes the estimated numbers of plastic SUCBs issued in Wales in 2015-18, and of plastic BfL issued in Wales in 2017-18.¹⁸

ii) Number and type of bags issued in Wales (2015-18): detailed results for large businesses with 250 or more employees

The second sub-section provides a more detailed account of the data and analysis of the numbers of plastic SUCBs and BfLs for large businesses. It also presents estimates of the number of very lightweight plastic bags issued by the top ten supermarkets.

iii) Number and type of bags issued in Wales (2015-18): detailed results for SMEs (fewer than 250 employees)

The third sub-section provides full results and estimates of the number of carrier bags issued in Wales by SMEs for all bag types covered in the SME survey questionnaire (presented in Annex E), including SUCBs, BfL and very lightweight plastic bags.

iv) Plastic SUCBs issued in Wales time series, 2011-18

For continuity with the PIR, the fourth sub-section presents the results of additional analysis undertaken to report a time series of the number of plastic SUCBs issued in Wales 2011-18. We present two time series estimates; one employing the methodology used in the PIR ('PIR method') and the other

¹⁸ 2017-18 is the only year for which BfL estimation is possible, due to a paucity of data available for large businesses.

employing the updated estimation method developed in this Study ('2019 method'). For more information about the two methods used, please see Section 2 and Annex C.

v) SME and large business practices in relation to the 5p SUCB charge

The fifth sub-section reports qualitative findings on business practices in relation to the 5p charge on SUCBs. It covers both large retailers and SMEs, though findings are largely based on interviews with SMEs, due to the low response rates from large businesses (as discussed in Section 2).

3.3 Throughout Section 3, all results and references to businesses or retailers in Wales relate to organisations in:

- Division 47 (Retail) of the UK Standard Industrial Classification of Economic Activities (SIC) 2007, excluding 47.91 (carpet retailers) and 47.53 (mail order companies)¹⁹; and
- Takeaway food retailers in SIC 2007 Code 56.10/3.

i) Number of bags issued in 2015-18: overall estimates (all businesses)

3.4 The figures presented in this sub-section are estimates for Wales as a whole, combining and summarising the estimates for large businesses and SMEs. All figures reported in this sub-section were produced using the '2019 method', unless otherwise specified. Further details about the figures underpinning overall results for Wales are provided in sub-sections ii) and iii).

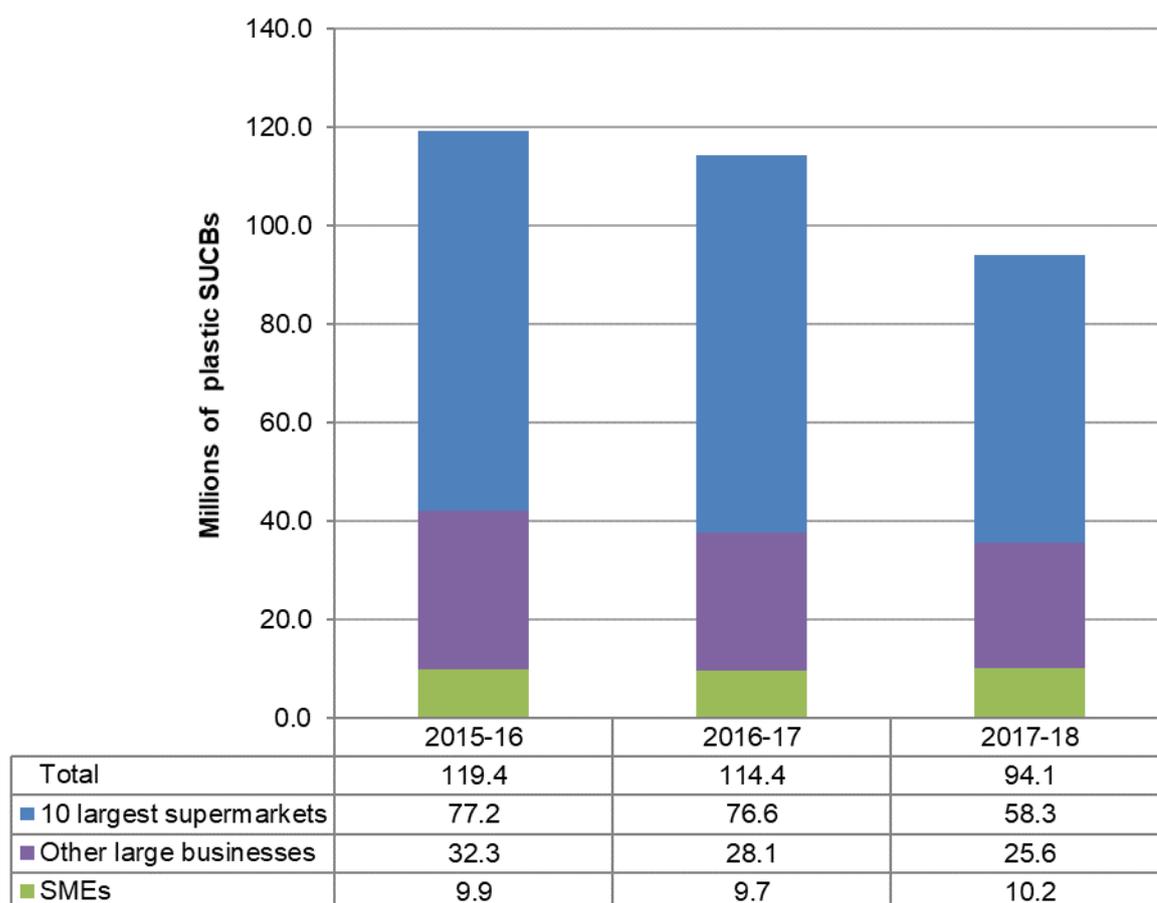
Single-use plastic carrier bags (SUCBs)

3.5 Figure 3.1 below summarises the estimated number of plastic SUCBs issued by retailers and takeaways in Wales in 2015-16, 2016-17 and 2017-18. Based on survey responses, and triangulation with data reported to Defra for England, we estimate that retailers operating in Wales issued 94.1 million plastic SUCBs in 2017-18, a reduction of 18% compared with the estimated 114.4 million plastic SUCBs

¹⁹ Carpet retailers and mail order companies were excluded as it was concluded during scoping and early piloting that such businesses were unlikely to be issuing carrier bags.

issued in 2016-17. This is further to a reduction of 4% in the previous year, with an estimated 119.4 million plastic SUCBs being issued in 2015-16.²⁰

Figure 3.1 Number of single-use plastic carrier bags issued by retailers in Wales, 2015-2018 (millions): ‘2019 Method’



Source: Retailer survey: SMEs and large businesses, extrapolated using the ‘2019 method’ described in Section 2 and Annex C.

3.6 The significant reductions during 2017-18 are due, predominantly, to actions by large supermarkets deciding to eliminate plastic SUCBs entirely from their stores during 2017 and 2018. We estimate that the ten largest supermarkets issued approximately 18 million fewer plastic SUCBs in 2017-18 compared with 2016-17.

3.7 Sainsbury’s became the first large supermarket to replace plastic SUCBs in its stores across the UK in 2015.²¹ Tesco followed, eliminating plastic SUCBs from its

²⁰ Further details of the approach used in producing this estimate are provided in the more detailed results discussion for large businesses and SMEs.

²¹ Sainsbury’s replaced their plastic SUCBs with slightly thicker reusable plastic BfL.

stores in 2017. Aldi, Asda, Lidl, Iceland, M&S, Morrisons and the Co-op eliminated plastic SUCBs from their stores either partway through or towards the end of the calendar year 2018, and Waitrose did so in March 2019.

- 3.8 Plastic SUCBs were still being used for many home deliveries during 2015-18. Such use is, however, expected to decline in 2019-20 with Asda and Tesco announcing their decisions, in July 2019, to stop using plastic SUCBs for online deliveries.
- 3.9 The data available are insufficient to allow assessment of the precise impact of recent supermarket policy changes in 2018 and 2019 on the total number of plastic SUCBs issued in Wales (in store and online). To do so would require more detailed information from large supermarkets about the number of plastic SUCBs issued in store versus for online deliveries.

Plastic Bags for Life

- 3.10 As noted in Section 2, it was not possible to collect sufficient data to estimate annual figures for the numbers of plastic BfL issued by businesses in Wales for the entire period of 2015-18. We are unable, therefore, to estimate an annual trend over that period. The available data did allow us to produce an overall estimate of the number of plastic BfL issued in Wales in 2017-18; however, this should be treated with caution due to the limitations of the methodology (please see Section 2 for further details).
- 3.11 The only reliable data available for plastic BfL at the time of the analysis was from the EIA-Greenpeace 'Checking Out on Plastics' study conducted in 2018²², with figures relating to the twelve-month period to the end of June 2018. Based on the EIA data, it is estimated that the total number of plastic BfL supplied in Wales by the top ten supermarkets was 65.2 million in 2017-18 (56.3 million excluding Aldi, Lidl and Iceland).
- 3.12 Whilst the available evidence, discussed in further detail in sub-section ii), is indicative rather than robust, it is clear the number of plastic BfL has increased considerably from the 40 million plastic BfL estimated, in the PIR, to have been issued in 2015. Recent evidence published by the EIA suggests the upward trend in

²² [Checking out on Plastics, EIA and Greenpeace](#) (2018).

the number of plastic BfL issued by the largest supermarkets continued between the calendar years 2018 and 2019.²³

- 3.13 Given the significant changes made by the largest supermarkets in 2018 and further elimination of plastic SUCBs, 2018-19 is likely to have been the year in which plastic SUCBs were no longer the most commonly issued bag type in Wales.

Other SUCBs and reusable carrier bags

- 3.14 Other bag types include other SUCBs (paper SUCBs and biodegradable / starch SUCBs), as well as other reusable bags, such as fabric bags.
- 3.15 The surveys of SMEs and large businesses included questions about the number of these bags issued. Unfortunately, the paucity of data from large businesses means it is not possible to provide robust estimates for all retailer types in Wales for these other bag types. Figures for all carrier bag types are, however, available for SME retailers. Estimates for bag types not covered in this sub-section are included, where available, in the detailed discussion of results from the SME and large business (sub-sections ii) and iii), below).

Very lightweight bags

- 3.16 There is insufficient evidence to estimate the total number of very lightweight plastic bags (like those given out in supermarkets for buying fruits and vegetables) issued by all retailer types in Wales in 2015-18. However, an estimate has been made, for 2017-18, of the number being issued in Wales by the top ten supermarkets, based on data obtained by the EIA and Greenpeace for the UK as a whole for 2017-18.²⁴ This is discussed at the end of sub-section ii). Combining this with the equivalent estimates for SMEs, discussed in sub-section iii), it is estimated that at least 60 million very lightweight plastic bags were issued in Wales in 2017-18.

²³ According to the latest EIA study, *Checking Out on Plastics 2*, the eight largest supermarkets providing data in 2018 reported that they had issued 960 million plastic BfL in the UK; in 2019, the same eight companies reported issuing 1.24 billion, with an additional 271 million sold by two further supermarkets.

²⁴ 2017-18 is the only year captured in the first EIA Greenpeace study 'Checking Out on Plastic', and for which sufficient data are available to inform an estimation.

ii) Number and types of bags issued: large businesses with 250 or more employees

- 3.17 As described in greater detail in Section 2, estimates of the numbers of plastic SUCBs issued by large businesses were based on retailer survey data collected for a sample of businesses in SIC codes known to issue SUCBs, triangulated with figures reported to Defra for England and grossed up to the total population of large businesses (those with 250 or more employees) in Wales. All figures reported in this sub-section were produced using the '2019 method', unless otherwise specified (for more detail on the '2019 method', see Section 2).
- 3.18 It is estimated that large businesses in Wales issued approximately 83.9 million plastic SUCBs in 2017-18, a 20% reduction compared with the estimated number issued in 2016-17 (104.8 million). This is further to a 4% reduction in 2016-17 compared with 2015-16, when an estimated 109.5 million plastic SUCBs were issued by large businesses. Table 3.1 below, presents estimates of the number of plastic SUCBs issued by the ten largest supermarkets in Wales over the financial years 2015-2018. The table then presents the overall estimates for the number of plastic SUCBs issued by other large businesses (other than the ten largest supermarkets).

Table 3.1 Estimated number of plastic SUCBs issued in Wales by large retailers (those with 250 or more employees) 2015-2018

Number of plastic SUCBs issued by	2015-16 (Millions)	2016-17 (Millions)	2017-18 (Millions)
a) The six of the top ten supermarkets where actual data was provided or available in the public domain	35.3	29.1	27.0
b) The remaining four supermarkets where the number of bags was estimated*	41.8	47.5	31.3
c) The top ten supermarkets (estimated) [a+b]	77.2	76.6	58.3
d) Other large businesses (i.e. all businesses with 250 or more employees excluding the top ten supermarkets) (estimated)**	32.3	28.1	25.6
e) All large businesses with 250 or more employees in Wales (estimated) [c+d]	109.5	104.8	83.9

* The figure for the remaining four supermarkets assumes their share of bags issued in Wales was the same as that of their share of bags issued in England for the corresponding year, as reported to Defra. See Annex C for further details.

** Estimates for 'other large businesses' assume the largest supermarkets account for a similar proportion of the total number of single-use plastic bags issued in Wales, as is the case in England (approximately 70% in 2017-18, based on figures reported to Defra).

Source: Desk research and retailer survey: large businesses, extrapolated

- 3.19 The limited response from large businesses on the number of plastic BfL and other types of bag issued precludes detailed analysis of the substitution effects, but it is possible to examine the numbers of plastic BfL issued in 2017-18 compared with the figure reported for 2015 in the PIR.
- 3.20 Due to the limitations explained in Section 2, the figures presented for plastic BfL are considered indicative rather than robust, so we have not attempted to estimate the numbers of plastic BfL issued in 2015-16 or 2016-17.
- 3.21 Table 3.2 below, presents the estimated number of plastic BfL issued by large businesses. As a result of the limited data provided in survey responses, the figures presented here for plastic BfL (Table 3.2) are largely based on estimates using data obtained from the EIA,²⁵ with details of the estimation method provided in Section 2 and Annex C.

²⁵ The EIA kindly provided access to the raw data on carrier bags underpinning figures reported in their [Checking out on Plastics report](#), EIA and Greenpeace, 2018.

Table 3.2 Estimated number of plastic BfL issued in Wales by large businesses (those with 250 or more employees) 2017-18

Number of plastic BfL issued by:	2017-18 (Millions)
The three of the top ten supermarkets who responded with data	26.6
The remaining seven of the top ten supermarkets (estimated)	38.5
The top ten supermarkets in total (estimated)	65.1

* Assuming the three of the top ten supermarkets for which data are available account for a similar % of plastic BfL in Wales as for the UK.

Source: Desk research and retailer survey: large businesses, extrapolated.

- 3.22 Whilst we are unable to produce robust estimates for plastic BfL, the evidence available at the time of writing indicates the number being issued in Wales increased substantially in the period 2015-18. It is estimated the top ten supermarkets issued more than 65 million plastic BfL in Wales in 2017-18, an increase of 62.5% compared with the 40 million plastic BfL estimated by the PIR to have been issued in Wales in 2015.²⁶
- 3.23 Methodological differences²⁷ may account for some of the estimated increase; however, even if we looked only at the seven supermarkets who were reporting to WRAP up to 2015 (i.e. the top ten supermarkets excluding Aldi, Iceland and Lidl), the estimated number of plastic BfL issued in 2017-18 would be at least 40% higher than the PIR estimate for 2015.

Very lightweight plastic bags

- 3.24 Due to the very limited response received from large businesses on very lightweight plastic bags, we were unable to use the survey responses to produce an estimate from the survey data. However, data collected by the EIA from the largest ten supermarkets indicates that just under 1.3 billion very lightweight plastic bags were issued across the UK in 2017-18. As the top 10 supermarkets are assumed to account for the vast majority of very lightweight plastic bags, it is estimated that

²⁶ Please see Figures 4.16c and 41.6d of the post-implementation review report.

²⁷ Specifically, the inclusion in the 2017-18 figures of estimates for large supermarkets not included at all in the Post Implementation Review figures (i.e. Aldi, Iceland and Lidl).

approximately 53.8 million very lightweight plastic bags were issued in Wales in 2017-18 by large businesses.²⁸

Other SUCBs and reusable bags

3.25 With the exception of very lightweight plastic bags, estimates for other SUCBs and reusable bag types issued by large businesses were not possible due to the limited response from large businesses and paucity of publicly available data to allow us to estimate the number of bags sold/issued.

iii) Number and types of bags issued: Small and Medium-sized Enterprises (SMEs), (fewer than 250 employees)

Number of SMEs issuing bags

3.26 As noted above, approximately 50% of SME respondents to the retailer survey reported they did not issue carrier bags at all. The majority of those not issuing bags had never done so due to the nature of their business activities and goods sold. The remainder of this section reports the attitudes and self-reported behaviours of SMEs that did issue bags.

3.27 The type of bag issued by the greatest proportion of SMEs in Wales was the plastic SUCB, with approximately two thirds (65.8%) of SME retailers indicating they issued this bag type in 2015-18, where bags were issued at all. This was closely followed by paper SUCBs, with more than half (53.3%) issuing paper SUCBs in 2015-18. Very few SME retailers (3.6%) issued reusable thick plastic bags (including BfL).²⁹ Table 3.3 shows the estimated number and percentage of retailers issuing each bag type.

²⁸ Assuming the percentage of very lightweight plastic bags issued in Wales is similar to the percentage of plastic SUCBs across the UK issued in Wales. See Annex C for further details regarding the estimation process.

²⁹ The survey asked SMEs to provide the number of reusable thick plastic bags issued, but it is unclear whether SMEs would provide a replacement bag free of charge in all instances. Therefore, this category is reported as reusable thick plastic bags, including BfL.

Table 3.3 Estimated number and percentage of retailers in Wales who reported issuing each bag type

Bag type	SMEs issuing each bag type	
	N	Percent*
Single-use plastic	2,768	65.8
Single-use paper	2,240	53.3
Single-use biodegradable / starch	386	9.2
Reusable thick plastic (including BfL)	153	3.6
Reusable fabric bag	447	10.6
Very lightweight plastic bags	105	2.5

* Percentages do not sum to 100% as some SMEs issued more than one type of bag. Figures grossed up to population of SME retailers in Wales, 2018.

Source: Retailer survey: SMEs, weighted

Amount charged per bag

- 3.28 As expected, the price charged by SMEs for most bag types ranged between 5-10p with a much larger variation in how much businesses charged for reusable fabric bags. Table 3.4 shows the number of SMEs who charged for bags and the range of prices charged per bag. The mean is not used as the data are highly skewed for some bag types.
- 3.29 The majority of SMEs issuing plastic SUCBs (approximately 97%) reported that they charged for this bag type.
- 3.30 Not all retailers that issued paper SUCBs would be expected to report in the survey that they charge for them. The SUCB charge regulations specify that retailers are not required to charge for bags that are:
- a) made wholly from paper and have maximum dimensions of 175 mm (width) x 260 mm (height), and do not have a gusset or handle; or
 - b) made wholly from paper and have maximum dimensions of 80 mm (width) x 50 mm (gusset width) x 155 mm (height), and do not have a handle.
- 3.31 Approximately 24% of those issuing paper SUCBs reported charging for them. Annex B gives a breakdown of businesses that reported issuing paper SUCBs by SIC code, along with the number of bags they reported issuing. Based on this analysis, it is theorised that up to 136 retailers out of 186 did not charge for paper

SUCBs when they should have done, accounting for about 5 million paper SUCBs issued in 2018.

Table 3.4 Number and percentage of SMEs who reported charging for bags plus price/charge

Bag type	Number who charged for bags		Number who did not charge		Price/ Charge (range)
	N	%	N	%	
Single-use plastic	2,511	96.8	257	3.2	5-10p
Single-use paper	533	23.8	1,707	76.2	5-10p
Single-use biodegradable / starch	283	73.3	103	26.6	5-10p
Reusable thick plastic (including BfL)	147	96.1	6	3.9	5-15p
Reusable fabric bags	347	77.6	100	22.4	5p-£5
Very lightweight plastic bags	6	5.7	99	94.3	5p*

* Actual price based on one observation

Source: Retailer survey: SMEs, weighted

Number of carrier bags issued by SMEs

- 3.32 Based on survey responses, we estimate that SMEs in Wales³⁰ issued approximately 10 million SUCBs in 2017-18, nearly 17 million single-use paper bags, and over 1 million very lightweight plastic bags. Table 3.5 shows the estimates for all bag types, including figures for the minority of SMEs that reported offering reusable bags (plastic and/or fabric bags). Overall, we estimate that the number of bags issued by SMEs has increased slightly across the period of interest.
- 3.33 The increase is also evident in the unweighted data, providing supporting evidence of a 'real' increase in the number of bags issued by SMEs over the period rather than this being a statistical artefact, which could have appeared solely as a result of weighting to reflect increases in the number of SMEs in Wales from 2015 to 2018. Increases in the number of plastic SUCBs issued are due to both an increase in the number of businesses in Wales and those issuing bags issuing a larger number in 2017-18, on average, compared with 2015-16.

³⁰ Retailers and takeaways in the SIC codes specified in Section 2.

Table 3.5 Number of bags issued by SME retailers and takeaways in Wales³¹ 2015-18, and calendar year 2018

Bag type	2015-16		2016-17		2017-18		2018	
	Total bags (Millions)	Number of SMEs issuing this bag type	Total bags (Millions)	Number of SMEs issuing this bag type	Total bags (Millions)	Number of SMEs issuing this bag type	Total bags (Millions)	Number of SMEs issuing this bag type
Single-use plastic	9.9	2,494	9.7	2,567	10.2	2,594	10.6	2,756
Single-use paper	16.8	2,143	16.5	2,152	16.9	2,215	16.6	2,240
Single-use biodegradable / starch	0.7	378	0.9	391	0.8	386	0.8	386
Reusable thick plastic (including BfL)	0.2	110	0.3	134	0.3	153	0.3	153
Reusable fabric bag	0.4	335	0.4	347	0.4	358	0.4	410
Very lightweight plastic bags	1.1	104	1.1	104	1.1	105	1.1	105

Source: Retailer survey: SMEs, weighted

³¹ SIC 47 (retail) and SIC 56.10/3 (takeaways) only.

- 3.34 Paper SUCBs were the most frequently issued bags, with more paper SUCBs being issued than plastic SUCBs. The estimated number of paper SUCBs issued in 2018 was similar to that issued in 2015-16.
- 3.35 The rise in the number of reusable bags issued by SMEs through the period of 2015-18 appears to have been driven by an increase in the number of retailers who issue such bags rather than an increase in the numbers of reusable bags being issued per retailer. However, for SMEs, reusable bags remained the least common bag type. Unsurprisingly, reusable bags were not offered at all by SME takeaways responding to our survey.

iv) Plastic SUCBs issued in Wales time series, 2011-18

Introduction

- 3.36 As highlighted in Section 2, the main difference between the method adopted in the PIR and the '2019 method' developed for this Report is the absence of data for Aldi, Iceland and Lidl at the time of the PIR estimation. This section details the results of further analysis conducted to allow a full time series to be reported for plastic SUCBs issued in Wales in the period 2011-18.
- 3.37 We report two time series; the first, based on the 'PIR method', and the second based on the '2019 method'. The only difference being that the latter ('2019 method') includes estimates for Aldi, Iceland and Lidl, excluded from the PIR.
- 3.38 To present the 'PIR method' time series required revised estimates for plastic SUCBs in 2015-18 excluding Aldi, Iceland and Lidl. The '2019 method' required estimates for Aldi, Iceland and Lidl to be produced for 2011-14, so these could be added to the PIR estimates. The analysis is briefly detailed below, before presenting the resulting time series for 2011-18.
- 3.39 For ease of reference, the figures from Figure 4.17 of the PIR are reproduced in Table 3.6 covering the period 2011-14.

Table 3.6: Estimated numbers of plastic SUCBs issued in Wales 2011-14: ‘PIR method’

Number of plastic SUCBs issued by:	2011 (Millions)	2012 (Millions)	2013 (Millions)	2014 (Millions)
Takeaways	13.0	7.0	7.3	7.4
Non - Food and Drink Retail	16.8	6.3	6.8	6.9
Food and drink Retail	294.1	70.9	81.5	84.7
Total*	323.8	84.1	95.5	99.0

*subject to rounding error

Source: PIR estimates – see PIR report Figure 4.17

Step One: Estimating plastic SUCBs issued in 2015-18 using the ‘PIR method’

3.40 Producing a time series for 2011-18 based on the ‘PIR method’ required revision of the 2015-18 estimates (‘2019 method’), as presented in sub-section i), to exclude Aldi, Iceland and Lidl. The available estimates for these supermarkets were simply subtracted from the 2015-18 figures (‘2019 method’) to provide equivalent figures for 2015-18 (‘PIR method’).

3.41 In Table 3.7, estimates from Figure 3.1 are reproduced after removal of the three large supermarkets not included in the PIR (Iceland, Lidl and Aldi).

Table 3.7: Estimated numbers of plastic SUCBs issued in Wales in 2015-18: ‘PIR method’

Number of plastic SUCBs issued by:	2015-16 (Millions)	2016-17 (Millions)	2017-18 (Millions)
Seven of the ten largest supermarkets*	64.5	62.3	47.6
All other large businesses*	32.3	28.1	25.6
SMEs	9.9	9.7	10.2
Total*	106.7	100.1	83.4

*excluding Aldi, Iceland and Lidl

Source: Retailer survey: large businesses and SMEs, ‘PIR method’ (see Section 2 and Annex C)

Step Two: Estimating plastic SUCBs in 2011-14 using the ‘2019 method’

3.42 To provide an updated time series for 2011-14 (‘2019 method’), figures estimated using the ‘PIR method’ were scaled up by adding in estimated figures for Aldi, Iceland and Lidl (please see Section 2 for how figures for Aldi, Iceland and Lidl were estimated). The results are presented in Table 3.8.

Table 3.8: Estimated numbers of plastic SUCBs issued in Wales in 2011-14: ‘2019 method’

	2011 (Millions)	2012 (Millions)	2013 (Millions)	2014 (Millions)
Estimated total for Aldi, Lidl and Iceland ^a	29.3	6.6	8.5	10.4
Total from original PIR estimates	323.8	84.1	95.5	99.0
Overall total	353.1	90.8	104.1	109.4

^a based on their 2015-16 contribution to the number of bags issued in Wales, factored down based on historical market share

Source: ‘2019 method’ (see section 2 and Annex C)

Step Three: Full time series 2011-18: plastic SUCBs ‘PIR method’ compared with ‘2019 method’

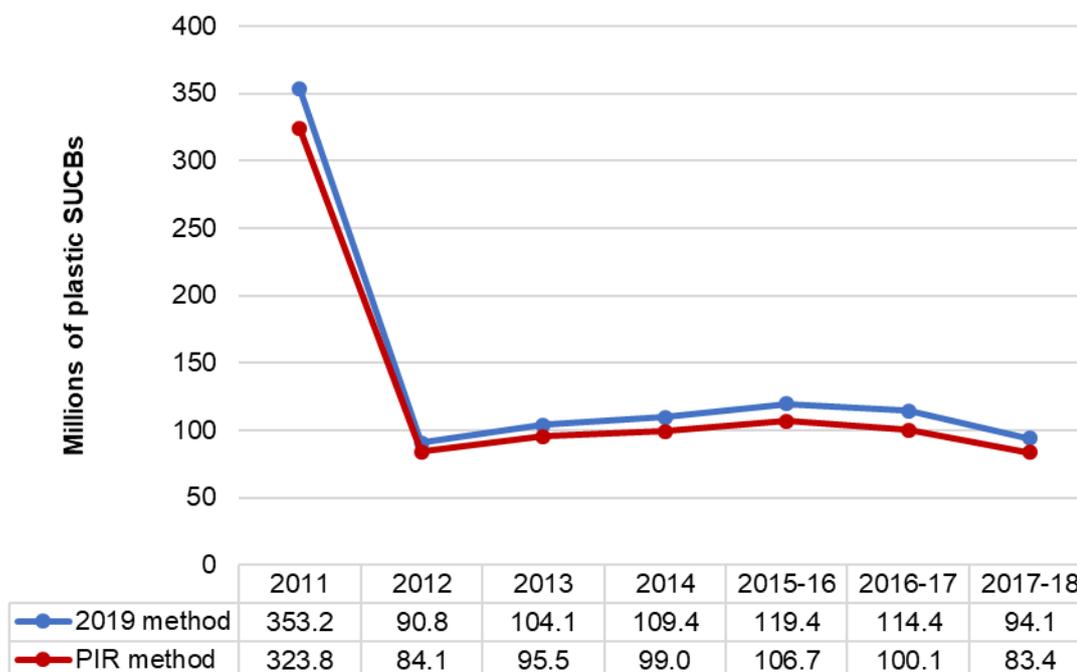
3.43 Figure 3.2 provides estimates of plastic SUCBs based on the ‘PIR method’ and of estimates based on the revised ‘2019 method’ for the period of 2011-18.³² It shows the figures are similar in magnitude regardless of estimation method, and follow the same overall pattern, with an increasing trend in the number of plastic SUCBs issued until 2015-16 when the number of plastic SUCBs declined. A combination of growth in the retail sector and people getting used to paying for plastic SUCBs is thought to have contributed towards the growth observed between 2012 and 2015-16.

3.44 The number of plastic SUCBs issued in 2017-18 appears similar to that in 2012, suggesting that actions in 2015-18, in particular steps taken by the largest supermarkets to eliminate plastic SUCBs from their stores, have countered the upward trend observed in the PIR.

³² The ‘2019 method’ includes estimates for Aldi, Iceland and Lidl, who were excluded from the PIR estimates. For further details, the reader should refer to Section 2.

3.45 As discussed in Paragraphs 3.6-3.9, it is known that the number of plastic SUCBs issued by the largest supermarkets – and therefore, in Wales as a whole – will have continued to fall in 2018-19; however, the data available at the time of analysis were insufficient to produce robust estimates for 2018-19.

Figure 3.2: Number of plastic SUCBs issued by all retailers in Wales, 2011-18, ‘PIR method’ and ‘2019 method’ (millions)



Source: Estimates applying the ‘PIR method’ and ‘2019 method’

v) SME and large business practices in relation to the 5p SUCB charge

Spending on bags by SMEs

3.46 To provide data similar to that obtained in the PIR, respondents were asked how much they spent annually on providing bags to customers. The results are summarised in Table 3.9, below. Some businesses provided monthly and some weekly estimates. These were multiplied by 12 and 52 respectively to give annual estimates.

3.47 The available data has been extrapolated to produce an overall estimate of the total spend for all SMEs for each bag type. It should be noted, however, that about 40% of SMEs were unable to answer this question, despite probing. Therefore, the results are considered indicative only of the amount spent on carrier bags (for each bag type).

Table 3.9: SMEs reported total annual spending on bags

Bag type	Number of SMEs	Total spend by these SMEs (£)*
Single-use Plastic	2,768	628,521
Single-use Paper	2,240	821,608
Single-use Biodegradable/Starch	386	46,418
Reusable thick plastic/Bag for life	153	20,143
Reusable fabric bags	447	364,882
Very lightweight plastic bags	105	51,550

* Extrapolated to all SMEs issuing each bag type based on the spend provided by the 40% able to provide figures.

Source: SME quantitative survey, weighted

Businesses practices, adherence to SUCB regulations

- 3.48 The SUCB regulations require businesses that employ more than ten people to keep a record of the number of carrier bags sold. Furthermore, VAT-registered businesses supplying over a thousand SUCBs per annum to which the charge applies are required to publish their carrier bag numbers in-store or online.
- 3.49 Findings from the retailer survey suggest many SMEs are not complying in full with regulatory requirements on reporting the number of carrier bags they supply. Three quarters (75%) of the SMEs that met the size criteria to report (i.e. with a staff size of more than ten people issuing SUCBs subject to the regulations) did not publish information on bag numbers in their stores or on their website – 32 respondents unweighted, Of these 32 respondents, 26 (81%) should have done so on the basis they issued 1,000 or more SUCBs per annum in 2017-18.
- 3.50 Comments made during interview and feedback from the research team suggest there was a lack of awareness of the requirement to display or publish SUCB figures among those to whom this requirement applies.

Attitudes towards the use of SUCBs and BfL

- 3.51 SMEs were asked the extent to which they agreed with a range of statements relating to the charge (see Fig 3.3, below).

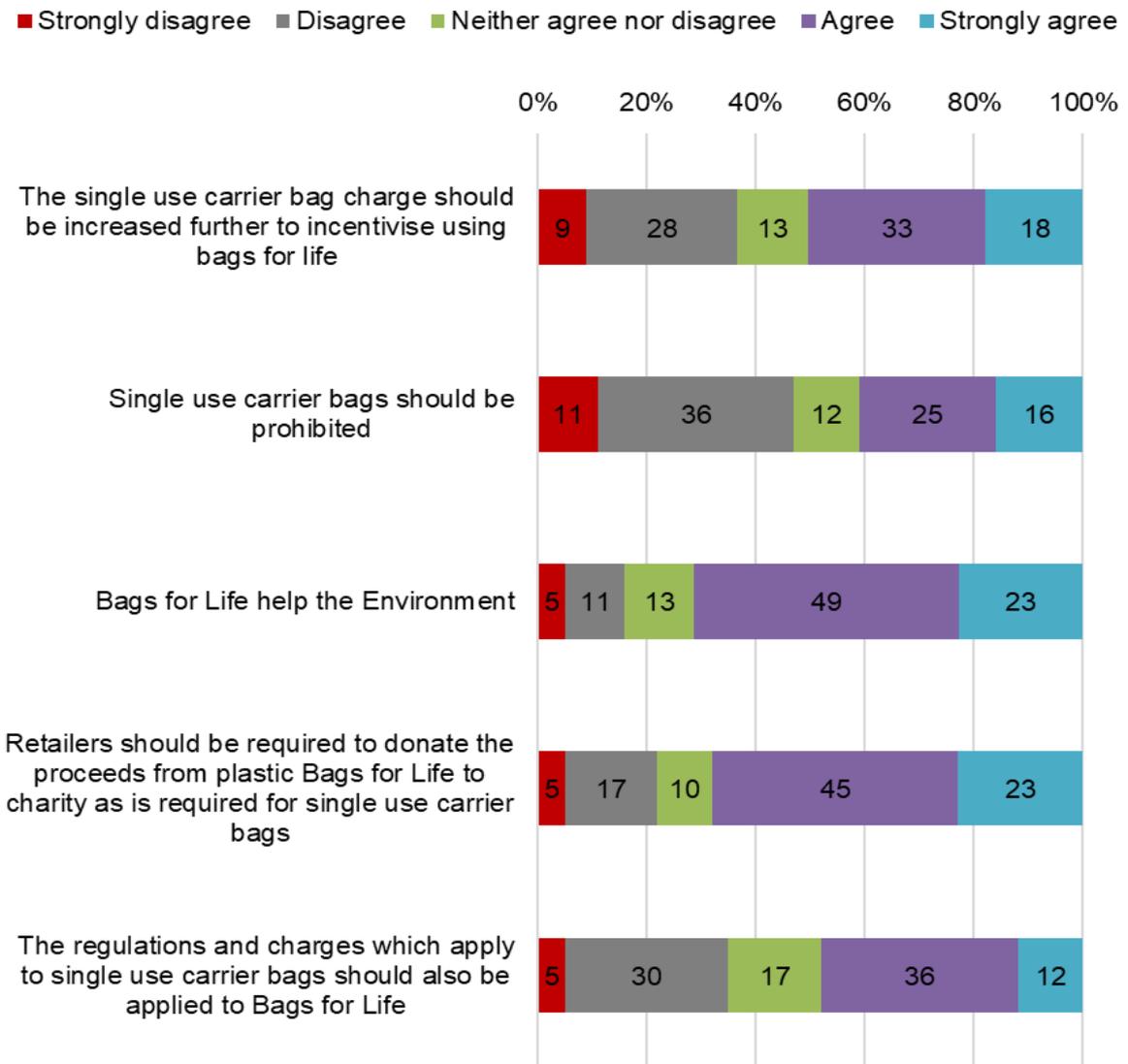
- 3.52 SMEs continued to exhibit positive attitudes towards the 5p SUCB charge, with 68% indicating they would be happy to see the charge continue as it is and 7% responding they would like it to be removed.
- 3.53 When prompted, around half (51%) of SMEs agreed or strongly agreed the SUCB charge should be increased to incentivise the use of BfL, while 37% of SMEs disagreed or strongly disagreed.
- 3.54 A smaller proportion of respondents (41%) agreed or strongly agreed that SUCBs should be prohibited entirely. A large majority (72%) agreed that 'BfL help the environment', and support was similarly strong for retailers being required to donate the existing proceeds from plastic BfL to charity, as is required for SUCBs, with 68% agreeing or strongly agreeing with this statement.³³
- 3.55 Responses were also mixed regarding whether BfL should be brought under the same regulations as SUCBs and be subject to the same charges, a question which was phrased in two ways to mitigate the risk of question wording impacting on the reliability of the responses. The two similar questions were included to mitigate conditioning bias; however:
- exploratory analysis of the open-ended responses and debriefing with researchers suggested respondents were confused by the statement including the word NOT, responding as if it were equivalent to the positively-worded statement; and
 - conditioning bias did not appear to be an issue, as only eight respondents agreed with all six statements and none consistently disagreed.
- 3.56 To address contradictions, the responses were recoded where it was clear from the additional qualitative text that the respondent meant otherwise. On that basis, 58 of the 131 contradictory cases were recoded. Figure 3.3 presents the results following revision. It shows that, after revisions to correct for contradictory responses where possible:
- 52% agreed BfL should NOT be brought under the same regulations as SUCBs or subject to the same charge;

³³ It should be noted in interpreting this response, that many SMEs do not offer reusable BfL at present.

- 48% agreed the regulations and charges that apply to SUCBs should also be applied to BfL.
- Approximately 16% of respondents neither agreed nor disagreed with the statements in both cases.

3.57 As some contradictory cases remain, we have excluded and recommended the Welsh Government disregards results for the statement that included the word NOT.

Figure 3.3: Attitudes of SME retailers to single-use plastic bags and bags for life (SMEs issuing carrier bags)



Source: Retailer survey: SMEs issuing bags, n=450, weighted

Whether businesses plan to phase out issuing single-use plastic bags

3.58 The majority of SME businesses that reported issuing SUCBs had no plans to phase them out (73.5%). However, around one in eight SMEs issuing SUCBs (15.4%) were considering phasing them out at the time of the survey. This is in contrast to large supermarkets, where the majority reported working to eliminate SUCBs from their stores if they had not done so already. One possible explanation for this difference between SMEs and large businesses may be that large businesses are under more public scrutiny, being responsible for a considerable majority of SUCBs issued. As a result, the largest supermarkets have been under greater pressure to act. Many of the largest supermarkets have been engaged by WRAP and have signed the Plastics Pact.³⁴

Table 3.10: Whether SMEs issuing SUCBs planned to phase them out

Does your business plan to phase out issuing SUCBs?	Percent
We have never offered single-use carrier bags	7.4
We have already phased out single-use carrier bags	3.8
We currently offer single-use carrier bags, but are considering phasing them out for customers	15.4
We currently offer single-use carrier bags and have no plans to phase them out	73.5

Source: SME quantitative survey, weighted

³⁴ Further details about the Plastics Pact can be found on the [WRAP website](#).

4. Consumer attitudes and behaviour (qualitative research)

4.1 The findings reported in this chapter are organised into four sections.

- i) attitudes to the charge, and how these have changed over time;
- ii) understanding and awareness of the charge;
- iii) bag use and disposal behaviour; and
- iv) attitudes towards any changes to the charge that may be introduced in the future.

4.2 To help evidence and illustrate the research findings, a series of verbatim quotes are included to demonstrate perspectives as articulated by the respondents. For the reader's ease of review these have been corrected for typo errors, but they have not been modified in any other way. Where a quote is from a Welsh speaking respondent, this is presented first in its original Welsh format and then in English.

i) Attitudes towards the charge, and how these have changed over time

4.3 This topic was covered in a mix of one-to-one discussions between respondents and the moderator to explore their attitudes to the charge, and also discussions in an open group form to explore the perceived benefits of the charge.

4.4 Respondents' overall view about the charge (elicited in the one-to-one discussions) was very positive. Within this overarching finding, three key sub-groups of respondents emerged:

- a) Those who were very positive towards the charge and cited specific benefits** – such as a decrease in the use of single-use plastic bags and reduced littering.

The best thing that the Welsh Government has done. Although I do not personally have definite figures, I understand that the use of plastic bags has dropped by a large percentage. This can only be a good thing for the environment. (Female, 35-54 years)

The charge for carrier bags is a good idea, it encourages people to stop buying them unnecessarily. I personally have noticed a lot less bags

littered around the countryside since it was introduced. (Female, 55+ years)

Three respondents directly and spontaneously referenced the fact that Wales had, in their view, 'led the way', as illustrated by the following comments:

I think it has been very successful and most people reuse rather than purchase single-use ones. Well done Wales for leading the way! (Male, 55+ years)

Mae Lloegr wedi dilyn siwt drwy godi tal am fagiau plastig felly man rhaid bod y polisi wedi llwyddo. The fact that England has since followed suit shows that the policy is seen as a success. (Female, 55+ years)

b) Those who were positive but had some questions; principally about the impact of the charge on plastic bag use and how the money raised from the charge had benefitted good causes:

I think the charge is a good thing in helping to reduce the amount of plastic bags used. However, I would like to see where the money is going. Supermarkets are keeping very quiet about which charities benefit while smaller shops seem proud to advertise how much they have collected and which charity they are supporting. (Female, 35-54 years)

c) A minority (three respondents) who expressed reservations. Two did not dispute the charge's aim but believed the charge was too little relative to the value of the shopping to disincentivise the purchase of new bags; whereas one described the charge as a tax and believed it was for the market to reduce bag use, not Government.

I don't think the charge has made much difference to the way people shop. A charge of 5-10 pence on your shopping? They will just buy them if they need them. The best thing is not to have them for sale. This would make shoppers take their own. (Male, 18-34 years)

We have enough taxes in this country - let consumers and the market decide. If I feel that bags are an issue and a supermarket is choosing to do nothing about it, then as a consumer I have a free choice to decide where I shop. The supermarkets and shops can make significant change as can consumers who can vote with their feet. Imposing a plastic bag tax is draconian. (Male, 55+ years)

- 4.5 Looking at the extent to which attitudes towards the charge had changed since its introduction (discussed in an open group forum) respondents comprised two main groups: (a) those who were positive towards the charge from the beginning and had remained so; and (b) those who were initially sceptical but became positive after the charge's introduction. Three respondents did not fall into either of these groups: one respondent was negative initially and had remained so; while as noted above, two reported they supported the premise of the charge but not the level it has been set at. There were no instances of a respondent being initially positive and becoming more negative since the charge's introduction.

I was in favour of the scheme from day 1. Any scheme set in place to help reduce waste, plastic pollution or indeed any pollution is a good thing in my opinion. It has raised awareness with the general public of the need to reduce our waste. (Male, 35-54 years)

Initially, it was a pain and I was constantly caught out and would forget to take them which resulted in me housing quite a substantial amount of bags. I am definitely more mindful now and my children do not remember a time where bags were free. (Female, 35-54 years)

Initially, I tried to resist and was against the charge, but now fully accept and understand the reasons why it has been introduced. [Moderator: Why did you resist?] I guess it is the old stance of not liking change, but then I mellowed once I got used to it! (Male, 55+ years)

- 4.6 Respondents were asked whether the charge had impacted their attitudes towards plastics in general. Here, the research provided evidence that around half of the respondents considered that the charge had an educative role in terms of raising

awareness about plastic pollution more widely. Others reported that they had always been aware of the issue and were careful to minimise their plastic waste, while a few reported that the charge is something that they pay without further thought.

It has definitely made me more aware of how much plastic we actually use. Before the charge was introduced, people took plastic for granted without being aware of the environmental impact. The introduction of the charge kicked off huge debates which, in turn, raised awareness of the damage we are doing by using plastic. (Female, 35-54 years)

It has made me more aware, but I still don't do anything about it. (Male, 18-34 years)

Not so much the charge itself. I was well aware of the environmental impact of plastics prior to the charge coming in. (Male, 18-34 years)

ii) Understanding and awareness of the charge

4.7 This section explores consumers' understanding of eight elements of the bag charge:

- i) the purpose of the charge;
- ii) the environmental benefits of the charge;
- iii) the concept of a reusable bag (and BfL);
- iv) that BfL can be replaced for free;
- v) what bags are covered by the charge;
- vi) whether SUCBs are still available in Wales;
- vii) how the monies generated by the charge are distributed; and
- viii) awareness of not being charged for SUCBs.

4.8 All of these topics were covered in one-to-one discussions between respondents and the moderator.

Understanding of the purpose of the charge

4.9 Respondents had a very good understanding about the core purpose of the charge, i.e. that it is designed to disincentivise the purchase of new bags and encourage

reuse. None queried or seemed to misinterpret what the charge is trying to do; and all understood that increased re-use of bags is the intended outcome.

More people are reusing bags so less are being bought and used. It was too easy when they were free to use them liberally. Less bags mean a cleaner environment as less plastic. (Female, 35-54 years)

Understanding of the environmental benefits of the charge

- 4.10 In keeping with respondents' level of understanding of the charge's purpose, there was also a high level of understanding about the intended environmental benefits, such as reduced resource use, waste, litter and marine pollution. In most cases, respondents believed that these intended benefits are being realised.

Cutting back on bags they use makes a contribution to saving resources and reducing waste. This will help the environment. (Male, 18-34 years)

Mae angen lleihau ein defnydd o blastig yn sylweddol ac ar frys. Rydym yn poeni am ei effaith ar anifeiliad gwylt ac yr amgylchedd. We need to reduce the amount of plastic we use dramatically, and quickly. I worry about the impact on wildlife and the environment. (Female, 35-54 years)

The benefits must be great. There is less plastic in people's homes and in bins and in our environment. Beaches in Wales must be cleaner. People who still have to use them are aware of the problems caused by them and dispose of them correctly. (Female, 18-34 years)

The benefits are reducing the amount of plastic being put into landfill and being littered around the countryside. Protecting the environment. Making people more aware of single-use plastic. (Female, 35-54 years)

Hopefully cutting down the planet's plastic waste and making us all think more. (Male, 18-34 years)

- 4.11 However, some questioned whether the charge is being as effective as it could be, while others questioned whether the charge is sufficient to deal with the scale of the problem regarding plastics and resource use more widely.

The benefits are clearly to make people aware of the consequences of their actions. Having said that it could have been so much more. The idea of paying for single-use bags was introduced in Wales not only as a deterrent but also to fund the cost of disposal and recycling. However, some seven years later we still are not recycling plastic bags. (Male, 55+ years)

I would think it is a tiny tiny dent in a land pile. Unfortunately. (Female, 35-54 years)

As a surfer, my main issue is with plastics in the ocean. I have seen first-hand the devastating effects it has on marine life. I will purposely go out and do beach cleans to remove plastic waste that has washed up on the coastline where I live. (Male, 18-34 years)

Understanding the concept of a 'reusable bag' and 'bags for life'

- 4.12 An objective of the research was to understand how respondents thought of, and defined, different types of bags. Questions were asked to establish how respondents described their shopping bags in their own words and, in particular, whether they made distinctions between single-use and reusable bags (including BfL).
- 4.13 Respondents clearly understood the distinction between single-use and reusable bags. Around one in three spontaneously used the term 'single-use' and around half spontaneously used the term 'bags for life' (prior to these terms being formally mentioned in subsequent tasks). However, while the overall concept of a reusable bag was well understood, when respondents tried to articulate the distinctions between different types of bags, their descriptions varied. For example, some mentioned the physical characteristics of bags (e.g. strong, robust, thicker); some the material (plastic, cotton, hessian); others the price. Several respondents characterised BfL as the weakest and most disposable of the reusable bag types (and the closest to what they describe, variously, as 'single-use', 'thinner' or 'normal' bags).

Question: First off, and picking up where we left off yesterday with the bags that you used on your last (or recent) shops, how would you describe these bags in your own words?

I purchase "Bags for Life" - I find them strong but a bit restricted to what I can fit in them, due to their strength and structure. (Male, 18-34 years)

I consider these bags quite strong for their purpose. The handles are strongly stitched into the fabric of the bag. The construction of the bag appears to have some reinforcement in place, maybe a hessian fabric in the body of the bag. I like to call these bags for life. They are more than suitable for the purpose intended. (Female, 35-54 years)

I use plastic bags for my shopping. They are strong and can be used for many years. Simple to carry. [Moderator: Say if someone asked you 'what kind of bags are they', what would you call them?] I would call them my shopping bags. [Moderator: What I was getting at was whether you'd classify them as a bag for life? Or a reusable bag? Or whether you'd still just think of them/describe them simply as shopping bags?] I would call them my bag for life. (Male, 55+ years)

I keep a selection of bags in the boot of my car. We just grab 5 or 6 when going into the supermarket. These are all reusable bags, some hessian, some cloth, some heavy-duty plastic. We do not use normal carrier bags. (Male, 35-54 years)

Robust bags for life. (Male, 55+ years)

One was a 10p bag that can be reused several times; the other is a more expensive bag that can be used for several months, if not years. (Male, 18-34 years)

Awareness that 'Bags for Life' can be replaced for free

- 4.14 When asked whether they were aware that bags for life can be replaced for free, the majority of respondents (approximately two thirds) said they were unaware of this. Awareness was not the only barrier since, among those respondents who reported they were aware, relatively few (five) had ever replaced a BfL. Key barriers include:

- the hassle of taking the bag back, relative to the small charge of the bag;
- The fact that bags can only be replaced at the same retailer where they were purchased (making this more logistically difficult); and
- an embarrassment factor, exacerbated by a concern that staff in store will not know about this, making it a more convoluted process.

These [bags for life] bags can be returned to store for replacement new ones. [Moderator: Have you ever done this?] Not really. Not worth the hassle of taking old bags back. (Female, 18-34 years)

As I have never done it before, it's a bit embarrassing! Just in case they would refuse it! (Male, 18-34 years)

I am aware, yes - but I never seem to have the right broken bag at the correct shop! I have never ever replaced a bag for life for free for the reasons just mentioned. (Female, 35-54 years)

Hmm, good question. I suppose it makes sense because it saves me paying for another one, but it's such a negligible amount of money it doesn't seem worth the hassle. So, the answer is probably not. (Female, 35-54 years)

- 4.15 Nonetheless, the experiences of those who had replaced a bag were generally positive and suggested a quick and painless process. There was one exception, where a respondent reported that the member of staff they had approached was not aware of the replacement policy.

Yes, I have. It's really easy just take it to the counter and swap. (Female, 35-54 years)

Yes, I took it to customer services. They swapped it, no questions. (Male, 18-34 years)

I was aware of this and have done so in the past. However, when I went to replace the bag the assistant wasn't aware that the replacement was free of charge and was going to charge me for a new bag until I pointed out it was non chargeable and they called the supervisor over who confirmed that it was indeed a free replacement. (Male, 55+ years)

Awareness of which bags are covered by the charge

- 4.16 Respondents were asked if they thought that the charge covers all types of carrier bags, or just single use bags. The research demonstrated that awareness of the bags covered by the charge was very low among respondents. All believed that the bag charge applies to all bags sold in Wales, including BfL. Furthermore, some respondents appeared to equate the cost that they are charged at point of sale with the level of the charge itself, leading to confusion about the level of the charge.

It covers all bags, I think. I've seen people buying different types of bags at checkout and pay for them. Some more expensive than others depending on the quality. (Female, 35-54 years)

I was under the impression that the Welsh Government do charge all carrier bags. Except for paper bags that small business use. (Male, 55+ years)

It's 5p for a single-use bag and 10p for a bag for life. (Female, 35-54 years)

There is a charge for bags in Wales, this depends on what type of bag you buy ranging from 5p up to 50p or more. (Female, 18-34 years)

Awareness of whether supermarkets still offer 5p single-use bags

- 4.17 The research highlighted mixed views among respondents about whether 5p single-use bags are still available to purchase in Wales. Some respondents thought they were, even though they reported that they no longer purchased them. Others commented that the stores in which they shop no longer provide them, with alternative bags starting at 10 pence.

The only thing I don't like now is they have scrapped 5p bags they are now 10p a bag. (Female, 35-54)

I try not to buy these, but many stores are stopping selling them. They are not very strong like they used to be and are small. (Male, 35-54 years)

I don't get them in store anymore because they are too thin and useless. They do come however if I order a takeaway and they end up being used to put the rubbish in. (Male, 18-34 years)

You can't get them from the Aldi or Morrisons that I shop in. It's the bags for life or a heavy-duty bag. (Female, 35-54 years)

Awareness of how the money generated by the charge is spent

- 4.18 Respondents were asked what happens to the money generated by the charge, and the research demonstrated low awareness in this respect. In some cases, they reported that they did not know; whereas in the majority of cases they understood the principle of the money going to local charities but were unsure whether this happened, whether it was redistributed within Wales, and what the benefits had been.

I have no idea. It was sold to us in the beginning that all the money would go to charity. Whether this is happening I cannot say. Is there anyone monitoring this or is it left to the goodwill of the shops? (Female, 35-54 years)

I would like to think that big companies give it to charity within the local community, I'm not sure if this is true though. When the charge first came out it was advertised every so often that money had been given but you don't see this now. (Female, 55+ years)

Herein lies a problem. People I've spoken to about the charge simply have no idea where the money raised goes. A lot of people simply think the money goes to the company's account. Projects that are implemented through the revenue raised should be made more public. (Male, 55+ years)

I don't have a clue where the money goes. (Male, 18-34 years)

- 4.19 Respondents were asked how they would like to see the charge monies distributed, and the research demonstrated a clear preference for local charities, based in Wales. They were also asked whether they thought the charge should be reserved specifically for environmental projects (as opposed to any charity). The majority of respondents preferred for it to be spent on environmental projects, particularly given the environmental focus of the charge. By contrast, some respondents did not have a strong view on which cause the funds are spent, so long as the funds were distributed in Wales.

I'd like to see it going to environmental charities, but I would prefer it to remain in the local area where it has been raised, instead of disappearing into some big pot to be used in other areas and probably never coming back to the original area. (Female, 35-54 years)

I personally would like to see the money raised spent on local environmental projects, cleaning of riverbanks, aid in cleaning beaches, more recycling bins and public bins etc. (Male, 55+ years)

Now that you mention it, it makes sense to go to environmental charities, seeing as the charge was put in place to reduce single-use plastic. (Female, 55+ years)

I think it would be better if it went to environmental charities such as Surfers Against Sewage, WWF and so on. This is because I believe the main reason for cutting down on plastic use is to help the environment and prevent climate change, so it would only be fair that these charities researching and working towards a better environment get repaid. (Female, 18-34 years)

Contrary to the dominant focus on local initiatives in the discussions, two respondents felt that the charge could be used to fund larger scale infrastructure projects or recycling services.

I hope that the revenue raised goes towards environmental projects, whether it be grants to local projects or towards large scale environmental issues i.e. sea defence. (Male, 55+ years)

Awareness of exemptions

- 4.20 Respondents were aware that there might be exemptions to the charge, but in almost all cases this was based on a patchwork of their own experiences over time, rather than formal or clear knowledge. For example, some noted that they were not charged for small bags in pharmacies, and others noted the same in takeaway food shops (which led them to conclude that these must be exempt). In other instances, a range of situations were noted where bags were not charged for:

I do get given a flimsy plastic bag for free when I buy live food for our reptiles, I generally take the tubs loose but if the children want to go to other shops when we are purchasing them I do ask for a bag, which is free of charge. Also, when I buy food for the dog (frozen raw food) a free bag is generally given then. (Female, 35-54 years)

It has happened on one occasion I can recall. The cashier simply said, "oh here's a couple of bags, don't worry about paying for them". I think the cashier thought they were doing me a favour in fairness to them. (Male, 55+ years)

Yes, I've been to plenty of shops and not been charged for them, whether the shop owner forgot to charge or not. [Moderator: Where?] Small village shops near where I live. (Female, 55+ years)

Only once - last week in fact. (Male, 18-34 years)

iii) Bag use and disposal behaviour

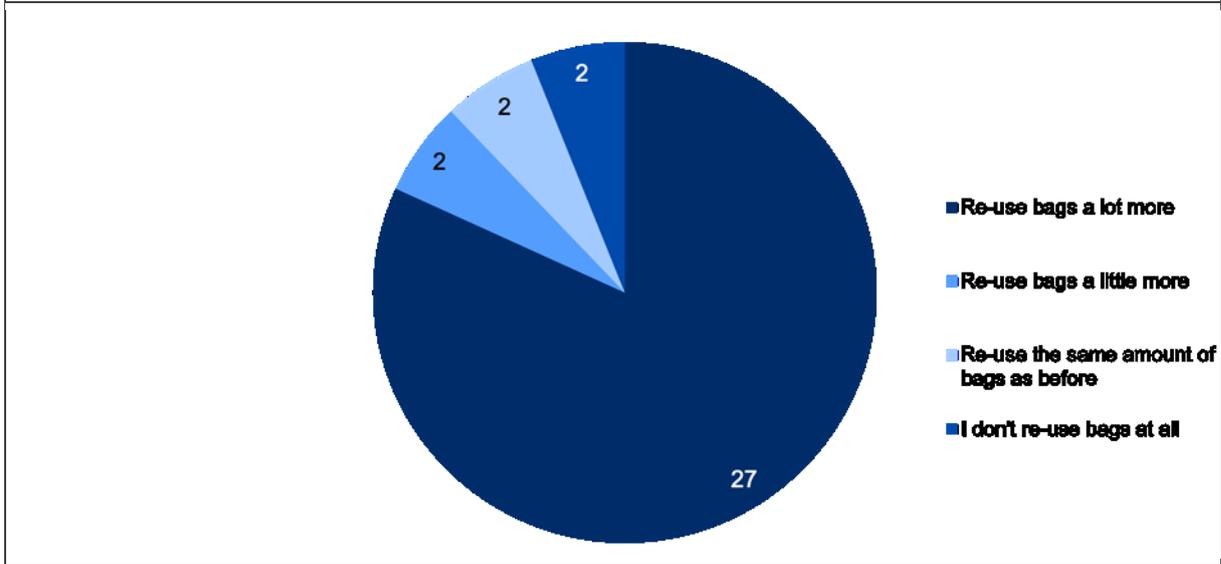
4.21 This section explores consumers' behaviour and is divided into three themes: i) the use of reusable bags; ii) the number of times bags are typically used; and iii) disposal behaviours. These topics were covered in one-to-one discussions between respondents and the moderator.

Use of reusable bags

4.22 Respondents reported a significant increase in their reuse of bags since the charge was introduced. In one of the Quick Poll tasks, 27 reported that they reuse bags a 'lot more' and two a 'little more', compared to two who reported 'the same as before' and two who reported that they 'never' reuse bags (Figure 4.1).

Figure 4.1: Change in bag re-use

Quick Poll. Thinking about your food shopping, how has your use of reusable bags changed since retailers started charging for bags? Do you...?



Source: 33 Respondents completing the online discussion board, October 2018

- 4.23 The research points to an important distinction in respondents' self-reported bag use behaviours between different types of shop; in particular, between large food shops, top up food shops and non-food shops.
- 4.24 For **large food shops**, bag re-use among the respondents was relatively regular and routine. When they were describing their most recent food shop (over the weekend prior to the online discussion board), the majority noted that they used reusable bags. Some of these respondents reported that they still occasionally buy more – for example if they do not bring enough bags relative to the size of the shop, or if they forgot because they left home in a rush. Others pointed to specific strategies, such as keeping bags in the car boot or folded in their handbag.

I bought my own bags which I use every week. I only buy in store on the odd occasion I forget my own bags. (Male, 55+ years)

I do my own food shop and I always take my own bags. Since the commencement of paying for bags (many years ago in Wales) I have never purchased a plastic bag. I have always got plenty of bags in the car. (Female, 35-54 years)

I always carry 2 carrier bags folded up in my handbag. I try not to spend unnecessary money on in store bags. It's enough for me as I live on my own

and buy bits rather than big shop. I use them for non-food items as well.

(Female, 55+ years)

My wife bought some better bags and we both got in the habit of leaving them in the car so that we always had bags when shopping for food or clothes. We have done this for a few years now and as soon as we unpack the goods, the bags are put back in the car. Prior to the charge, I just used the bags in the shops, so this has definitely made me use less plastic. (Male, 55+ years)

Normally, I forget to take bags (despite having a cupboard full of them) and end up buying them at the store. However, on my most recent shop, the items were small enough to carry and so I didn't need a bag. (Male, 35-54 years)

- 4.25 Many respondents also reported regular bag re-use for **smaller top up shops** – although a higher number of respondents noted less consistent bag re-use than was the case for larger shops. For example, several noted that they have to buy bags because they hadn't planned to do a shop and, therefore, had not taken bags with them.

In [supermarket x] we had to buy the bags in store. But in [supermarkets y and z] we took our own bags for life. [Moderator: what was the difference?] We didn't intend to go to [supermarket x] that day, we just popped in, so we didn't take bags. But when we know we are going shopping we take the bags. (Male, 55+ years)

Normally, if I have planned to go to a big shop - supermarket or a day of shopping - I would be organised and take bags with me. If I'm just nipping to the shop after work, I don't always have bags with me so either carry the stuff to the car or, if there's too much, I get a carrier bag. (Female, 18-34 years)

- 4.26 In contrast to both types of food shop, bag reuse among the respondents for **non-food shops** was less systematic and planned, often reflecting the types of shops themselves (i.e. where product purchase is less certain). Some respondents reported that they reuse bags equally for food and non-food shops, but these are in a minority and typically reflect those who have developed strategies to have close access to bags in a range of situations (in a car boot or folded up in a handbag).

When I go food shopping, I always take my own bags unless I completely forget (which I rarely do). But as for other types of shopping I hardly ever take any bags with me. The type of bag doesn't bother me at all, it's just that I never think of taking a bag with me clothes shopping. (Female, 35-54 years)

I keep a bag that folds and fits into a small holder in my handbag so that I have a clean one for any clothes that I might purchase. My handbag is a backpack type which holds quite a bit e.g. cosmetics etc. If I purchase any items, clothing or otherwise too large to fit into my bag I carry them over my arm back to the car. In Wales we have had to pay for bags for a few years now so being a "Cardi" I make sure I am well prepared for any shopping sprees that I might succumb to! (Female, 35-54 years)

4.27 In addition to uncertainty of purchase preventing consistent bag re-use, other factors identified by respondents included:

- **Fashion and appearance** were considered, by some of the respondents, to be more important for non-food shops. Some wanted to be judged positively based on a branded bag to reflect their purchase; others wanted to avoid being judged negatively for using a food shopping bag. This view was more prevalent among younger respondents aged 18-34.

Yes, it differs as we very rarely take them clothes shopping as we do not want to carry bags around from shop to shop, also clothes shops normally issue you with more desirable bags. If you buy a ring, for example, from a nice jeweller and you spent a lot of money you would expect a nice-looking paper bag/box that you could present to someone. Also, in a way it is a bit of a fashion statement, shallow as it is. (Male, 18-34)

Mae pobol weithiau yn edrych yn hurt arnai am ddod allan o NEXT hefo bag TESCO, a dyna yw y broblem fwyaf dwi'n credu, newid meddylfryd pobol am pa fath o fagiau sydd yn dod o pa siop. People look daft at me for coming out of Next with a Tesco bag. That's the problem - we need to change people's mind-set about which bags they can use in different settings. (Female, 18-34 years)

- A desire to 'protect' a new product and a concern about food shopping bags 'contaminating' new clothing items:

I only take reusable bags for food shopping. I don't even think to take them for clothes shopping, not that I would want to really. I willingly pay for the bag for clothes shopping. I think it's that clothes shopping is a luxury not necessity, the thought of putting new clothing items in crumpled old used bags doesn't feel right. (Female, 18-34 years)

I do like having a new bag for clothes, but I wouldn't get a bag in every shop, I would just ask for one big one if I was shopping all day. I think it must be a psychological thing. Because there really is no difference. They are all bags and all consumables, so I guess it comes down to the thought process. It feels nicer having your clothes in a new bag rather than one you've found crushed in the bottom of your handbag. (Female, 35-54 years)

I usually take along my reusable bags but on occasion I will buy a bag specifically for clothing items if the items already bought in my reusable bags would contaminate the clothing in some way. (Female, 18-34 years)

- The hassle factor of carrying around bags around for non-shopping (again when purchase is not a given anyway):

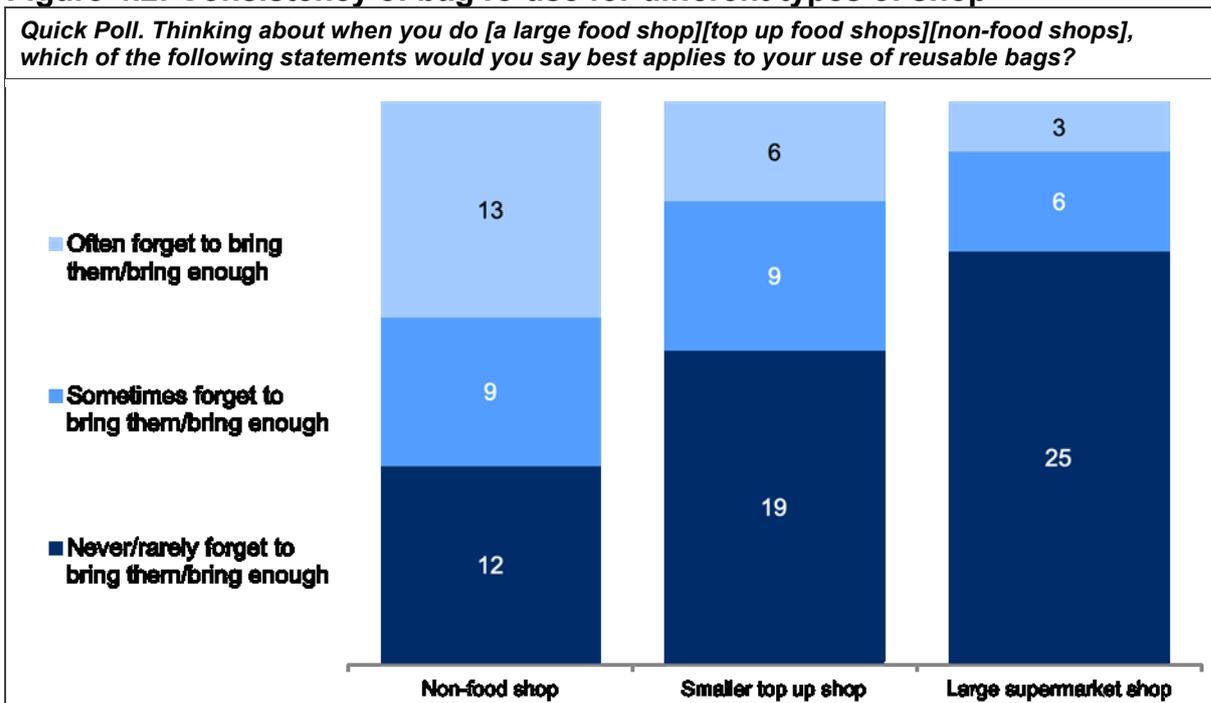
Often, I will go for a look and not always buy something, whereas when I go food shopping, I'll always buy something! (Male, 18-34 years)

Fyddai byth yn mynd a bagiau aml dro pan yn siopa dillad. y rheswm am hyn ydi os nad ydwyf yn gweld eitemau fyddai yn hoffi ei prynu mi fyddaf yn teimlo bod hi yn gwastraff amser mynd a bagiau efo fi. I don't take them, because if you then don't buy anything, it would seem like a bit of a wasted effort to have carried the bags around all day. (Female, 35-54 years)

4.28 The finding of variation in bag re-use across different types of shops was reinforced by a series of Quick Poll tasks (Figure 4.2):

- **Large food shops:** 25 of the respondents reported that they 'never' or 'rarely' forget to reuse bags (compared to six who 'sometimes' forget and three who 'often' forget).
- **Top up food shops:** 19 of the respondents reported that they 'never or rarely' forget to reuse bags (compared to nine who 'sometimes' forget and six who 'often' forget).
- **Non-food shops:** 12 of the respondents reported that they 'never' or 'rarely' forget to reuse bags (compared to nine who 'sometimes' forget and 13 who 'often' forget).

Figure 4.2: Consistency of bag re-use for different types of shop



Source: 34 Respondents completing the online discussion board, October 2018

4.29 Subject to the caveat of the small number of respondents involved, those aged 55+ years were more likely to say they rarely or never forget to reuse bags (across all three types of shop).

Number of bag re-uses

- 4.30 Respondents consistently reported that they reuse BfL (or other types of reusable bags) until they are 'broken' – which sometimes refers to a clear structural failure, such as handles coming off, but also sometimes to a more ambiguous and subjective defect, such as 'become untidy', 'dirty' or 'have the odd hole'.

When the reusable bags become untidy, or holes appear in them, I will then get rid of them. (Male, 35-54 years)

I dispose of my bag when it becomes unsuitable for purpose. The last time I disposed of my bag was when the handles of the bag became loose from the main body of the bag. (Male, 55+ years)

If it has literally fallen apart and won't carry my shopping anymore. (Male, 18-34 years)

- 4.31 Some also disposed of them early when they are refashioned to serve a different purpose (e.g. a bin bag, a football boot bag or a makeshift food waste caddy liner).

If it's broken with holes I generally just pop it in the general rubbish. Also, the children do use them when clearing the rubbish from their rooms so again they get popped into the general waste. (Female, 35-54 years)

They seem to disappear with the kids using them to wrap their football boots or using them as a washing/ironing basket. I would use them for longer if they didn't keep vanishing. (Male, 35-54 years)

The only time I would dispose of a reusable bag is if it has a hole in. I also use them for food waste as the council have said we can use plastic bags for the food bin now, as they recycle them. This makes more sense to me than buying bin liners to throw straight in to compost. (Female, 35-54 years)

- 4.32 In general, respondents reported that stronger reusable bags last for a long time (e.g. anything from six months to many years of use); whereas for BfL there was a higher variance (e.g. anything from 'several uses' or '3-4 times' to months or years of use). Some respondents found it difficult to give a definitive answer since they have a 'pool' of bags in use (e.g. in the back of a boot or in a drawer) and, in this

instance, they disposed of bags periodically based on those that appear the oldest or the dirtiest.

Partly, my reason is when I use them about 3-4 times, they do tend to get dirty or they tend to get the odd hole in them. (Female, 35-54 years)

I find that in general use they last about 2 months, before that they start to break, and the handle is usually the first part to go. (Female, 18-34 years)

I have a 'bag for life' I have used for well over 12 months. I have found the more careful you are with storing of the bag the longer it lasts. (Male, 55+ years)

We continue to use until the bag breaks. I don't know how long this is but guess they last a year or more. Using once a week, this would be 50+ times. (Male, 55+ years)

- 4.33 Where respondents continue to use SUCBs, they tended to say that they are disposed of quickly. These respondents either reported disposing of them immediately after one use or, in some cases, finding a second (single) use for them – for example as a bin bag, food waste caddy liner, or to carry lunch in.

They are used for rubbish in the smaller bins in the house. I have used them to take my lunch to work in from time to time. (Male, 35-54 years)

I never throw them away straight away - I use them for the food recycling bin. That's really the only use I have for them. (Female, 18-34 years)

I try and use them a few times or, if not, I use them to dispose of cat litter. (Female, 35-54 years)

If I do get these it's only to get something small from the shop and then I dispose of them in the bin. (Female, 18-34 years)

Mae bagiau untro yn hwylus iawn iw ail ddefnyddio, cario bwyd ir gwaith, cadw fan bethau o amgylch y ty hefoi gilydd, hefyd meant yn hwylus yn y oergell i gadw bwyd. Am ei bod yn llai ac yn ysgafnach 'na'r bagiau aml dro meant yn well iw ail ddefnyddio. They are still useful for carrying food to work, storing bits and pieces around the house, and for wrapping food before storing in the

freezer. The fact that they are lighter and less bulky means they are more convenient to re-use. (Female, 35-54 years)

Disposal of Bags for Life

- 4.34 The research pointed to a mixed pattern of bag disposal between two main routes – the recycling and the general rubbish. There was evidence of some confusion among respondents as to whether the bags can be recycled in the kerbside collection, and likewise evidence that some respondents put them in the recycling even though they believe that they are not accepted by the council (in the hope that they will be or, in their view, should be).

I will put them in my plastic recycling bag that the local council collect even though I know they will not recycle it. (Male, 18-34 years)

Unfortunately, our local authority does not recycle them, so we put them in the general waste. (Female, 55+ years)

Put it in the recycling. Although I was told recently that you can't recycle them so now, I am not sure. Again, more knowledge and advice would be better, so we all work together on the same goal. (Female, 55+ years)

iv) Attitudes towards any changes to the charge that may be introduced in the future

- 4.35 This section explores attitudes towards the charge moving forward and is divided into four themes: i) any suggested changes to the charge that respondents made; ii) views on extending the charge to cover BfL; iii) views on increasing the level of the charge; and iv) reactions to the idea of extending the charge to other single-use plastics. These topics were covered in an open group discussion whereby respondents could see – and respond to – each other's comments.

Suggested changes to the charge from respondents

- 4.36 The majority of respondents were content with the charge as it currently exists and wanted it to continue. In contrast, one respondent – who conceptualised it as a

stealth tax – wanted it to be removed. Nonetheless, respondents did make a number of suggestions for possible changes and tweaks, including:

- More widespread promotion of paper bags, or biodegradable bags, as an alternative to plastic;
- An increase in the charge to further discourage use of SUCBs;
- More information about the impact of the charge and how the monies have been distributed in Wales;
- More advertising that BfL can be taken back and replaced for free, and making it a rule that bags can be replaced irrespective of where they were purchased
- Removing exemptions for some retailers in Wales
- Phasing out plastic bags (and other single-use plastics) altogether

No changes necessary as far as I can see. It seems to work quite well, although I haven't any figures to prove one way or other. (Male, 18-34 years)

One change I would like to see would be the option of having paper bags as an alternative to plastic. I know some shops do provide paper bags, but the vast majority is plastic. It would be nice to see the 5p charge going towards implementing this across Wales. (Female, 35-54 years)

More information provided so that the public actually know how the scheme is getting on. (Female, 18-34 years)

The scheme appears to be working well although maybe a slight increase in the charge for single-use bags might be beneficial to reduce the number of single-use bags being used. (Female, 35-54 years)

For me personally, I would like to be able to change a bag for life at any supermarket, regardless of if you purchased it there along with an idea of if/where the money raised is going. (Female, 18-34 years)

Extending the charge from single-use carrier bags to bags for life

- 4.37 Respondents were asked whether they would support or oppose an extension of the charge so that it also covered all bags (i.e. BfL as well as single-use carrier

bags). The responses in this open forum suggested widespread support for an extension of the charge to cover all types of bag. Respondents consistently gave the same reason: respondents already think this is the case (and so the support is by default). In fact, learning that there is no charge for BfL – and, by extension, that none of the money generated from buying these bags goes to good causes – undermined confidence to some extent for some respondents.

I would support an extension of the charge to cover all bags. To be honest, I thought it already did. (Male, 35-54 years)

Yes, I would agree that the scheme should include bags for life, I was not aware that they weren't. I assumed that all bags were raising money for good causes, but this is clearly not the case. (Male, 55+ years)

I thought there was a charge for bags for life. I would support charges though. (Female, 18-34 years)

That explains why in many supermarkets the single-use bags are no longer available. I did ask in Asda and they said they had run out. Clearly the supermarkets are profiting from what was intended to be a good thing for society. (Male, 55+ years)

- 4.38 There were also multiple comments from respondents for the focus to be on phasing out plastic bags altogether or encouraging the adoption of alternatives, such as paper and biodegradable bags.

Yes, I would support the extension of the charge. Plastic bag use needs to be phased out. There are other/better options. (Male, 18-34 years)

I would support an extension but changes also need to be made in what types of bags are available. We should be moving towards no plastic rather than producing more, but an extension in charges could make people realise that they need to reuse bags more rather than producing and buying them. (Female, 35-54 years)

Increasing the level of the charge

- 4.39 On the issue of increasing the level of the charge, respondents in this research fell into one of three groups:

- (a) Around half argued for a significant increase in the charge – to 20 or 25 pence, in order to incentivise bag reuse and help phase out as many plastic bags as possible:

I think it could possibly increase yet further. 5p is nothing and in my opinion makes no difference to people's pockets. If it were higher then it would hopefully encourage people to reuse their bags to save money. Raise it to 20p.
(Male, 18-34 years)

I would support an increase. Maybe 25p would be a better charge as that is expensive, and if you are shopping every day that would soon mount up.
(Female, 18-34 years)

I would increase it further and have people get the message but ensure consumers know where the money is going as to benefit elsewhere and to enforce that price of bags are kept the same no matter where they shop.
(Female, 35-54 years)

Mae 10c yn rhesymol ond ella fuasai ei godi i 20c am fagiau untro yn neud i rhywun feddwl ddwy waith am gofio dod a bag. An increase to 10p would seem reasonable, though upping it to 20p might be more effective at getting people to change their behaviour. (Male, 35-54 years)

- (b) A similar (slightly smaller) number wanted the charge to be increased incrementally to no more than 10 pence, with the aim of nudging consumers in Wales to redouble their efforts without making bags too expensive:

I have no problem paying 10p for bag - it's not a great cost and you don't notice it in the price of a shop. (Male, 18-34 years)

I think 20p is too much, 10p would be reasonable enough I think. (Female, 18-34 years)

- (c) Two respondents wanted the charge to stay at the current level and one who wanted the charge removed altogether.

I think it should remain the same as most people are used to it now as it has been in for 7 years. (Male, 55+ years)

No, I wouldn't support it. It's like any tax once they start, they keep wanting to take more and more over time. I think the charge should be 0p. [Moderator: When you describe it as a tax, do you think the Welsh Government is receiving money from the charge?] Yes, Government is receiving money for the bags.
(Male, 55+ years)

Extending the charge to other single-use plastics

4.40 The final task in the online discussion explored views towards extending the charge's remit to single-use plastics more widely, beyond SUCBs alone. Some respondents agreed with extending the charge to other plastics and were supportive of any initiative to phase them out (including banning them as an alternative to charging for them):

I support any changes to help the environment. Paper cups and straws, loose vegetables in the supermarket with paper bags available. (Female, 18-34 years)

I would support any charge on single-use plastics. People are too quick to use them without a second thought for their impact on the environment. Putting a charge in place could encourage people to use their own cups in cafes (I know some places do already) there are also paper straws available. (Male, 18-34 years)

Single-use and the plastic bags for life phased out altogether. (Male, 35-54 years)

100% get rid of plastic straws and cups etc. Also packaging on everyday items. Plug in air fresheners come in 2 layers of plastic, fruit in plastic containers, pasta. Surely all others and more could come in a paper source.
(Female, 18-34 years)

4.41 However, a larger group of respondents disagreed. They were not against reducing single-use plastic per se but felt, instead, that the onus should be on companies and retailers to cut back on the amounts of plastic being used at source. For example, reducing the amount of plastic wrapping on parcels, or paper cups instead of plastic

cups, and more 'on site' recycling facilities (e.g. one noted McDonalds providing specific recycling bins for the packaging they produce).

- 4.42 There was general consensus among respondents that companies needed to take greater responsibility. One participant noted observing some positive changes to the way companies were approaching the use of plastics of late. Another felt that retailers were generally reluctant, or too slow to change, and so needed to be compelled by the Welsh Government.

I think companies are fully aware of the situation, however because policy makers don't push them hard enough, they prioritise their own commercial priorities over the environment. Legislation needs to be put in place to force companies to change their thinking and behaviour. (Male, 35-54 years)

I wouldn't support a charge on plastic straws but would encourage outlets to switch to more eco-friendly alternatives. Paper straws and paper cups are already available so it's a case of persuading the retail outlets to change. (Male, 55+ years)

I don't think it would be fair to charge for them. You buy the plastic bags, whereas straws and cups are in with the price and not optional all the time, whereas having a bag is optional. (Male, 35-54 years)

Yr wyf wedi sylwi yn ddiweddar bod nifer o fusnesau bwyd lleol wedi dechrau newid eu defnydd o lwyau, ffyrc a gwelltynau plastig am rhai pren, papur a defnydd 'biodegradable'. Felly nid yw'n credu y dylem talu am y mathau yma o blastig ond y dylai busnesau fod yn gyfrifol o wneud newidiadau. I've noted that recently a number of local food outlets have started to move away from plastic cutlery and cups, preferring instead to use wood, paper and other biodegradable materials. So from my perspective rather than charge, it would be better to find ways to encourage companies to change their practice. (Female, 18-34 years)

5. Conclusions and implications for the Welsh Government

Conclusions

- 5.1 The number of SUCBs issued by retailers in Wales decreased by 21% between 2015-16 and 2017-18. In 2017-18, we estimate that 94.1 million plastic SUCBs were issued, compared with 119.4 million in 2015-16.
- 5.2 This decline is predominantly the result of large supermarkets ceasing to issue plastic SUCBs in the period of interest. If the trend prior to 2017-18, also observed in the PIR, had continued without action by supermarkets and other large businesses, the number of SUCBs would most likely have increased slightly between 2015-16 and 2017-18.
- 5.3 In contrast, although the majority of SMEs were positive about the charge and around one in eight (15.4%) of SMEs reported they were considering phasing SUCBs out, the overall number of plastic SUCBs issued by SMEs increased from 9.9 million in 2015-16 to 10.2 million in 2017-18. This increase was due both to an increase in the number of SMEs in Wales and in the number of plastic SUCBs being issued per SME, though SMEs accounted for only 11% of all plastic SUCBs in 2017-18.
- 5.4 Evidence from the qualitative research suggests consumers are now in a routine of using reusable bags, at least for their large supermarket shops. The same is true when it comes to smaller top up shops, albeit to a lesser extent. However, consumers reported being less likely to bring their own bag for other types of shopping, such as clothes shopping.
- 5.5 It is estimated that 65.2 million plastic BfL were issued by the largest ten supermarkets in Wales in 2017-18. Whilst the available evidence should be considered indicative rather than robust, it is clear the number of plastic BfL issued in Wales has continued to increase since 2015. The estimate and figures from the 2019 study cannot be directly compared with the PIR estimates for 2015 due to the fact data for Aldi, Iceland and Lidl were not collected at the time of the PIR. This makes an analysis of change over time in BfL problematic. However, estimates based on only the seven largest supermarkets reporting to WRAP at the time of the PIR (as opposed to the current largest ten supermarkets) indicate that, at a

minimum, the number of BfL issued per annum was at least 40% higher in 2017-18 than in 2015. Recent evidence published by the EIA suggests this upward trend has continued between the calendar years 2018 and 2019.³⁵

- 5.6 Similarly, there has been a rise in the number of reusable plastic bags issued by SMEs over the period of 2015-18, driven by an increase in the number of retailers who issue such bags. These are sometime sold as BfL even though they are not replaced free of charge when they become worn.
- 5.7 On the basis of the available evidence, we estimate that 2018-19 was the year plastic BfL took over from plastic SUCBs as the most commonly issued bag type in Wales.
- 5.8 In order to support the Welsh Government in meeting EU reporting requirements, the Study also sought to provide an estimate of the number of very lightweight plastic bags issued in Wales. For 2017-18, we estimate that the largest ten supermarkets issued approximately 53.8 million very lightweight plastic bags, with SMEs issuing 1.1 million in addition.
- 5.9 Retailer attitudes towards the SUCB charge remain positive, with more than two thirds (68%) agreeing it should continue and relatively few disagreeing (7%).
- 5.10 Similarly, most consumers who participated in the qualitative research were positive about the SUCB charge. Consumers appeared to have a good understanding of the core purpose of the SUCB charge and a high level of understanding of the intended environmental benefits. Consumers clearly understood the distinction between single-use and reusable bags in general; however, relatively few of those participating understood they are entitled to a free replacement BfL.
- 5.11 Where consumers had concerns about the SUCB charge, this tended to be about whether the charge was high enough to disincentivise the purchase of new bags.
- 5.12 Some consumers were unsure how the money collected from the SUCB charge was spent and reported that they'd like to know more about this. This is consistent with findings in the PIR, where just over one in three consumers (36%) interviewed

³⁵ According to the latest EIA study, Checking Out on Plastics 2, the eight largest supermarkets providing data in 2018 reported that they had issued 960 million plastic BfL in the UK; in 2019, the same eight companies reported issuing 1.24 billion, with an additional 271 million sold in 2019 by two further supermarkets for which data was not provided in 2018.

said that they did not know what happened to the proceeds from the charge. When asked, all consumers participating in the current Study expressed a clear preference that the money should be spent on local charities based in Wales. Furthermore, a majority agreed the charge should be reserved specifically for environmental projects.

- 5.13 Consumers were also supportive of an increase in the SUCB charge, with around half supporting an increase to 20p or 25p, and a similar, though slightly smaller, number supporting an incremental increase to no more than 10p. Only three of the 34 respondents were unsupportive of an increase, with two wanting it to remain at 5p and one arguing for the charge to be removed entirely (though this respondent saw it as a tax and thought the Welsh Government was receiving money for the bags).
- 5.14 Similarly, more than half of SME retailers (51%) agreed or strongly agreed that the SUCB charge should be increased to further incentivise the use of BfL, compared with just over a third who disagreed or strongly disagreed (37%).
- 5.15 However, many consumers thought the SUCB charge already applied to BfL, and, were, therefore, supportive of extending the charge from SUCBs to BfL. Learning that there was no SUCB charge for BfL – and, by extension, no mandatory requirement that the money generated was donated to charity – was quite a shock to a number of the qualitative research participants.
- 5.16 In contrast, whilst the majority of SMEs were supportive of being required to donate the proceeds of BfL to charity (68% of SMEs issuing bags agreed or strongly agreed), responses were mixed when retailers were asked whether BfL should be brought under the same regulations as SUCBs (with a 50/50 split in the responses), possibly due to the wider requirements (e.g. needing to keep records and for larger SMEs to report the number of bags issued).
- 5.17 There was limited consumer support for extending the SUCB charge to cover other single-use plastics (e.g. plastic posting bags, plastic food packaging, plastic cups) on the basis most consumers felt the onus should be on the retailers to take action to reduce single-use plastic packaging at source.
- 5.18 About 97% of SMEs reported that they were charging for plastic SUCBs, though the retailer survey responses suggest some non-compliance in charging for paper

SUCBs and – from SMEs with ten or more employees supplying 1,000 or more SUCBs per annum – when it came to the publishing of information on the number of SUCBs issued.

Implications for the Welsh Government

- 5.19 The first implication of the research findings is that the SUCB charge should be continued. It enjoys widespread support and appears to have been effective in raising awareness of the environmental impact of SUCBs, as well as leading to a significant and sustained reduction in the number of SUCBs issued in Wales.
- 5.20 However, the numbers of plastic BfL being used in place of plastic SUCBs are concerning, and the Welsh Government should consider strategies to reduce the number issued, and increase consumer re-use of plastic BfL and encourage greater use of non-plastic reusable bags.
- 5.21 There appears to be support, in general, for the SUCB charges and requirements to be extended, with evidence from this research indicating a majority of consumers and retailers would be supportive of:
- a) Increases to the SUCB charge; and
 - b) Action to require the proceeds from BfL to be donated to charity (as is already required for SUCBs).
- 5.22 It is recommended the Welsh Government undertakes a fuller consultation process if it considers extending the SUCB charges to cover other single-use plastics. There was limited support from consumers for the SUCB charges to be extended to other single-use plastics, as consumers felt the onus should be placed on the retailers to reduce single-use packaging at source.
- 5.23 The challenges encountered in this Study in obtaining data on the numbers of bags issued by the largest ten supermarkets implies a need for the Welsh Government to consider introducing mandatory reporting requirements, similar to those applying in England for plastic SUCBs. Ideally, this should cover other bag types of interest, in particular plastic BfL, given many supermarkets have eliminated plastic SUCBs entirely since this Study was undertaken, or are in the process of doing so. Despite two of the top ten supermarkets having eliminated plastic SUCBs from their stores

during or prior to 2017-18, the largest ten supermarkets were responsible for an estimated 62% of all plastic SUCBs issued in Wales in 2017-18 (large businesses and SMEs), and are likely to be responsible for an even greater percentage of plastic BfL. Annual data from the largest ten supermarkets could provide useful insights to inform future policy decisions, as well as allowing the net environmental impacts of future policy and actions taken by retailers to be fully analysed and scrutinised.

- 5.24 SMEs continued throughout 2015-18 to issue similar numbers of plastic SUCBs each year, in contrast to large businesses where the use of plastic SUCBs was clearly in decline. The Welsh Government may wish, therefore, to consider strategies (e.g. communications strategies) to encourage SMEs specifically to move away from issuing SUCBs.
- 5.25 The Welsh Government should also consider whether any action is required to raise awareness and understanding of the existing requirements, given it appears:
- Some SMEs were not acting in full compliance in 2017-18; and
 - Some consumers had a limited understanding of the scope of the charges and would like to have known more about how proceeds from the charge are spent.
- 5.26 Finally, this study had to dedicate significant time and resources to trying to collect information from the ten largest supermarkets and other large businesses, not always successfully. To ensure the participation of sufficient numbers of the largest retailers to allow robust estimates to be made of the number of carrier bags of different types being issued, and in the absence of mandatory reporting requirements, we encourage the Welsh Government to liaise with the ten largest supermarkets and other large businesses to secure commitment to supporting future studies.

6. References

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The [Single-use Carrier Bags Charge \(Wales\) Regulations 2010](#).

Further information about the SUCB charge can be found on the Welsh Government's [Carrier Bag Charge for Wales website](#).

³⁶ Kindly supplied by the EIA for use in this research without restriction.

Annex A: Number of interviews split by SIC code, and number supplying carrier bags

SIC Code	Total interviewed	Number issuing carrier bags in 2015-18 (any type)
Retail sale in non-specialized stores with food, beverages or tobacco predominating	46	43
Other retail sale in non-specialized stores	55	22
Retail sale of fruit and vegetables in specialised stores	9	8
Retail sale of meat and meat products in specialised stores	37	33
Retail sale of bread, cakes, flour confectionery in specialised stores	19	12
Retail sale of beverages in specialised stores	6	5
Retail sale of tobacco products in specialised stores	7	5
Other retail sale of food in specialised stores	21	17
Retail sale of automotive fuel in specialised stores	11	5
Retail sale of computers, peripheral units and software in specialised stores	7	0
Retail sale of audio and video equipment in specialised stores	4	0
Retail sale of textiles in specialised stores	48	1
Retail of hardware, paints and glass in specialised stores	20	9
Retail sale of carpets, rugs, wall and floor coverings in specialised stores [EXCLUDED IN FINAL ANALYSIS]	4	0
Retail sale of electrical household appliances in specialised stores	6	1
Retail sale of furniture, lighting equipment and other household articles in specialised stores	3	0
Retail sale of books in specialised stores	14	9
Retail sale of newspapers and stationery in specialised stores	32	21
Retail sale of music and video recordings in specialised stores	2	1
Retail sale of sporting equipment in specialised stores	33	11
Retail sale of games and toys in specialised stores	25	6
Retail sale of clothing in specialised stores	35	23
Retail sale of footwear and leather goods in specialised stores	1	0
Dispensing chemist in specialised stores	30	30
Retail sale of medical and orthopaedic goods in specialised stores	1	0
Retail sale of cosmetic and toilet articles in specialised stores	4	1
Retail sale of flowers, plants, seeds, fertilisers, pet animals and pet food in specialised stores	28	12
Retail sale of watches and jewellery in specialised stores	29	15
Other retail sale of new goods in specialised stores	5	1
Retail sale of second-hand goods in stores	1	0

Retail sale via stalls and markets of other goods	2	1
Retail sale via mail order houses or via Internet [EXCLUDED IN FINAL ANALYSIS]	5	0
Other retail sale not in stores, stalls or markets	7	0
Retail sale of mobile telephones in specialised stores	3	1
Retail sale of musical instruments and scores in specialised stores	4	0
Retail sale of furniture, lighting equipment and other household articles (other than musical instruments),	38	1
Retail sale of leather goods in specialised stores	5	3
Retail sale of hearing aids in specialised stores	3	1
Retail sale by opticians	20	2
Other retail sale of new goods in specialised stores (other than by opticians or commercial art galleries), N.E.C.	91	31
Retail sale of antiques including antique books, in stores	3	1
Retail sale of second-hand (other than antiques and antique books) in stores	8	1
Take away food shops and mobile food stands	167	117
Total	899	450

Annex B: SMEs issuing paper SUCBs by SIC code (unweighted), and number not charging for such bags

SIC Code description	SMEs issuing paper SUCBs (n)	SMEs not charging for paper SUCBs (n)
Retail sale in non-specialised stores with food, beverages or tobacco predominating	15	12
Other retail sale in non-specialised stores	13	7
Retail sale of fruit and vegetables in specialised stores	6	6
Retail sale of meat and meat products in specialised stores	10	9
Retail sale of bread, cakes, flour confectionery in specialised stores	8	7
Retail sale of beverages in specialised stores	1	1
Retail sale of tobacco products in specialised stores	3	2
Retail sale of automotive fuel in specialised stores	1	1
Retail of hardware, paints and glass in specialised stores	4	2
Retail sale of books in specialised stores	8	6
Retail sale of sporting equipment in specialised stores	2	1
Retail sale of games and toys in specialised stores	2	1
Retail sale of clothing in specialised stores	9	5
Retail sale of flowers, plants, seeds, fertilisers, pet animals and pet food in specialised stores	6	5
Other retail sale of food in specialised stores	12	6
Retail sale via stalls and markets of other goods	1	1
Retail sale of mobile telephones in specialised stores	1	1
Retail sale of leather goods in specialised stores	1	0
Other retail sale of new goods in specialised stores (other than by opticians or commercial art galleries), n.e.c.	19	14
Retail sale of antiques including antique books, in stores	1	0
Take away food shops and mobile food stands	64	49
Total who should or may need to charge for paper SUCBs	187	136
Retail sale by opticians	1	1
Dispensing chemist in specialised stores	29	24
Retail sale of newspapers and stationery in specialised stores	13	12
Retail sale of watches and jewellery in specialised stores	11	9
Total who are exempt or likely to be exempt from the Regulations / requirement to charge for paper SUCBs	54	46
Total for all SMEs	241	182

Annex C: Estimation process for the number of bags issued in Wales

Large businesses (those with 250 or more employees)

Plastic SUCBs

As noted in Section 3, analysis of carrier bag data submitted to Defra for England indicated the top ten supermarkets were responsible for approximately 70% of the total number of plastic SUCBs issued by all large retailers. As a result, the decision was taken to focus data collection on the top ten supermarkets.

Data on the number of SUCBs issued in the period of interest was provided to the Study by four out of the ten supermarkets. For two others, the information was sourced from their websites. For the four remaining supermarkets, the number of plastic SUCBs was estimated based on the figures reported to Defra in 2016-17 and 2017-18.

Estimates for Wales for the number of plastic bags issued in 2015-18 were made as follows:

- Defra data on the number of chargeable plastic SUCBs supplied in England in 2015-16, 2016-17 and 2017-18 was analysed to determine:
 - The total number of plastic SUCBs issued in England by all large businesses with 250+ employees, and percentage of which were issued by the top ten supermarkets – Aldi, Asda, Co-Op, Iceland, Lidl, M&S, Sainsbury's, Morrisons, Tesco and Waitrose.
 - The total number of plastic SUCBs supplied in England by the top ten supermarkets, and percentage of which issued by each supermarket.

The table below summarises the data for 2016-17 and 2017-18:

ENGLAND DATA – plastic SUCBs	2016-17		2017-18	
	Number of bags	%	Number of bags	%
Aldi	67,203,919	4%	75,499,387	6%
Asda	165,766,608	11%	192,973,018	16%
Co-operative Group	125,929,333	8%	120,629,924	10%
Iceland	100,174,324	6%	101,617,379	8%
Lidl	53,060,333	3%	3,625,380	0%
M&S	92,503,288	6%	92,285,584	8%
Sainsbury's	51,762,560	3%	53,947,789	4%
Morrisons	191,508,650	12%	183,271,200	15%
Tesco	637,181,382	41%	332,741,451	27%
Waitrose	62,803,780	4%	62,747,015	5%
Total for top 10 supermarkets	1,547,894,177	100%	1,219,338,127	100%
Total for all retail 250+ reporting for that year	2,116,049,476		1,754,130,932	
Top 10 supermarkets as a % of all 250+ businesses	73%		70%	

- Data obtained from large businesses (through fieldwork or desk research in this Study) were then analysed to determine:
 - For which of the top ten supermarkets data were available for Wales and the total number of plastic SUCBs issued by these supermarkets;
 - The percentage of plastic SUCBs supplied by the top ten supermarkets in England that were issued by supermarkets for which data were available for Wales.
- To estimate the number of plastic SUCBs issued by the top ten supermarkets in Wales, it was assumed that the percentage share of total plastic SUCBs for each of the top ten supermarkets in Wales was the same as in England. Taking 2017-18 to illustrate the calculation process:
 - Data on the number of plastic SUCBs supplied in 2017-18 were available for six of the top ten supermarkets; this totalled 27,033,191 plastic SUCBs in Wales in 2017-18.

- The six supermarkets for which 2017-18 data were available for Wales supplied approximately 46.3% of the plastic SUCBs issued in England by the top ten supermarkets in 2017-18.
- Therefore, it was assumed that the 27,0331,191 plastic SUCBs above was 46.3% of the total number of plastic SUCBs supplied in Wales in 2017-18.
- The same approach was used for 2015-16 and 2016-17, but with reference to Defra's data for England for those years. For 2015-16, figures reported to Defra covered only the six-month period of October 2015 to March 2016; however, no records are available prior to this as the period prior to October 2015 pre-dates the introduction of a plastic SUCB charge in England.
- To produce a complete estimate of the number of plastic SUCBs supplied by large businesses (250+ employees), it was assumed again that the situation in Wales was identical to that in England in 2015-16, 2016-17 and 2017-18, using data reported to Defra. For example, in 2017-18, the top ten supermarkets accounted for 1,219 million out of the 1,754 million issued in England in that year by all large businesses – approximately 70%. Therefore, it was assumed the estimate for Wales for the top ten supermarkets (as produced above) was also approximately 1,219/1,754 (~70%) of the total supplied by all large businesses in 2017-18. This was repeated for 2015-16 and 2016-17 using the same approach, but on the basis of figures reported to Defra for those years.

The approach to estimating the total number of plastic SUCBs supplied by large businesses in Wales assumes that the distribution of total plastic SUCBs for the top ten supermarkets in Wales is the same as in England. It also assumes the top ten supermarkets account for the same percentage of plastic SUCBs issued by large businesses in Wales as is the case in England. The main reasons for adopting the approach described above and associated assumptions were as follows:

- The variation in numbers of bags issued by individual retailers was too high to perform a simple extrapolation (e.g. grossing up based simply on the percentage of supermarkets covered), including insufficient information about the size of individual stores;
- The data available for England was the best population level data available for the period of interest from which estimates for Wales could be calculated;

- Analysis of data for England indicated the number of bags issued by individual retailers did not correlate with market share, so it was not appropriate to use market share as the basis for the core estimation process;
- The figures produced through the estimation process were consistent with historic overall estimates for the seven retailers reporting to WRAP on a voluntary basis up to 2014;
- Estimates produced for 2017-18 were similar in magnitude to known figures in previous years for the one case where data were available for 2015-16 but no subsequent years, and it was known there had been no significant changes in policy during the period in question. This provided assurance the estimated figures were plausible and consistent when read alongside other available information.

The key limitations of the approach are the assumptions that the distribution of plastic SUCBs in Wales across the ten large supermarkets and large businesses were the same in Wales as in England during the period of interest. If this was not the case, overall estimates for Wales may be inaccurate. Unfortunately, WRAP no longer holds the data for individual supermarkets reporting voluntarily in the period up to 2014 for the authors to test this assumption. The consistent trend of estimates produced in this study when read alongside the revised PIR estimates (see revised time series in Figure 3.2) provides reassurance the approach provides figures consistent with the trend prior to 2015-16. We are further reassured by the fact that:

- Actual data for plastic SUCBs in Wales were available for six of the ten supermarkets;
- The six supermarkets for which plastic SUCB data are available for 2017-18 account for 52% of sites operated by the ten large supermarkets in Wales – compared with an estimated 46% of plastic SUCBs;
- We obtain a figure of 52 million plastic SUCBs for 2017-18 from a ‘simple extrapolation’ based on the number of stores (i.e. a similar figure to the 58 million obtained using the ‘2019 method’).³⁷

³⁷ By ‘simple extrapolation’ we mean dividing the known plastic SUCBs for the six supermarkets we have data for by the number of stores they operate in Wales and multiplying the result by the total number of stores operated by the top ten supermarkets in total (based on analysis of Experian data).

Overall estimates of plastic SUCBs for large businesses were added to the estimated figures for SMEs in producing overall estimates of the number of plastic SUCBs supplied in Wales as a whole. Further details about the estimation process used for SMEs can be found later in this Annex.

Bags for Life (BfL)

Estimating the number of BfL issued by large businesses was more difficult, as retailers are not required to report on the numbers of BfL issued in any nation in the UK. It was also more difficult because actual data on BfL was received for only two of the ten large supermarkets for the entire time period under consideration. One further supermarket provided data for the financial year 2017-18 and the calendar year Jan – Dec 2018, but reported they did not have records of numbers issued from previous years. As a result, the figures presented in the report are only for the year 2017-18. Data reported by supermarkets was used where provided (three of ten cases), with overall estimates for Wales being made with reference to UK-wide data collected from large supermarkets by the Environmental Investigation Agency (EIA) and Greenpeace.

The data supplied by the EIA was that underpinning the overall estimates for plastic SUCBs, BfL and very lightweight bags included in *Checking out on plastics A survey of UK supermarkets' plastic habits*.³⁸ The EIA collected data on the number of plastic SUCBs, plastic BfL and very lightweight plastic bags for the UK through a survey methodology similar to that employed in this Study. The data requested by the EIA was for the 12 months to the end of June 2018, so is slightly different but very close to the 2017-18 period of interest in this Study (year to end of March 2018).

Eight of the top ten supermarkets responded to the EIA on the number of BfL issued in 2017-18, with their responses totalling 958.9 million BfL. However, the two supermarkets not responding to the EIA happened to be among the three responding to the survey conducted during this Study, allowing estimates to be made for the top ten supermarkets in Wales.

³⁸ [Checking out on plastics A survey of UK supermarkets' plastic habits](#). The raw data was kindly supplied by the EIA for use in this research without restriction.

The estimation process used UK-wide EIA data on the number of plastic SUCBs and plastic BfL supplied in conjunction with the three survey responses received to this Study in producing an estimate. For the three supermarkets where data were available, these were included directly in the estimate. For the remaining seven supermarkets, the number of plastic BfL supplied in Wales was estimated by assuming the figure for Wales would be 4.14% of the number issued across the UK by the seven supermarkets according to UK-wide EIA data. The assumption of 4.14% was based on the proportion of all plastic SUCBs in the UK supplied by the top ten supermarkets estimated to have been issued in Wales.

The EIA reported the top ten supermarkets supplied a total of 1,197 million plastic SUCBs in 2017-18. However, this is lower than the Defra figures reported for England in 2017-18 for the same top ten supermarkets (1,219 million). Closer inspection of the data confirmed that one supermarket had reported zero plastic SUCBs on a forward-looking basis having ceased to issue plastic SUCBs during 2018. The estimated total SUCBs for Wales for the remaining nine of the top ten supermarkets was approximately 49.6 million plastic SUCBs, suggesting the number supplied in Wales accounts for approximately 4.14% of the 1,197 million plastic SUCBs supplied by the nine supermarkets across the UK as a whole.

Very light-weight plastic bags

Data collected by the EIA from the largest ten UK supermarkets indicates that just under 1.3 billion very lightweight plastic bags were issued across the UK in 2017-18. It was assumed that the percentage of very-lightweight plastic bags issued in Wales in 2017-18 was similar to the percentage of plastic SUCBs in the UK supplied in Wales. As for BfL, the calculation was based on the nine supermarkets for which valid UK figures were available to reflect SUCBs issued in 2017-18 (49.57 million out of 1,197 million plastic SUCBs issued across the UK in 2017-18). This suggests approximately 53.8 million very-lightweight plastic bags were issued in 2017-18 by the top ten supermarkets. The estimate assumes the percentage of very light-weight plastic bags in the UK that were supplied in Wales is similar to the percentage of UK SUCBs issued in Wales.

SMEs

For the SME survey, a total of 890 SME retailers were interviewed. Out of these 890 retailers, 440 (49%) reported not issuing bags at all in the period of interest. All figures for

SMEs were based on extrapolation of the survey responses using the weights presented in Annex C.

Two approaches were used in soliciting data on numbers of bags issued by SME retailers to enhance the accuracy of data capture:

1. Respondents were asked to provide annual estimates for each bag type they issued corresponding to the respective years/period they had been in operation. About 80% of businesses who issued bags provided estimates based on this approach.
2. The approximately 15% of businesses who were unable to provide annual estimates were asked to provide an estimate of how many bags they issued in either a typical week or typical month in a typical year. To calculate an annual figure, businesses who provided:
 - a monthly figure had their figure multiplied by 12
 - a weekly figure had their figure multiplied by 52.

The annual estimate was then adjusted for days the business was closed in a year, based on their survey responses.

A further 5% of businesses issuing carrier bags (22 respondents) were unable to provide estimates for bags issued even after probing by researchers. For these businesses, bag estimates were imputed based on the unweighted average for all businesses that were able to provide an estimate of the number of bags they issued for a given bag type. For all estimates and all bag types the number of cases where imputed figures were used was eight or fewer. As a result, the majority of figures reported are based on actual estimates provided by respondents to the survey.

The overall achieved sample was weighted to provide estimates representative of all SMEs in Wales in SIC 47 and 56.10/3, excluding 47.91 (carpet retailers) and 47.53 (mail order companies) where it was concluded during scoping and early piloting that such businesses were not issuing any carrier bags at all. For each year of interest, an eight-category weight (as shown in Annex D) was used to account simultaneously for regional bias in sampling (four regions), and bias in the division between retailers under SIC code 47 plus takeaways (two sectors), and to gross up estimates to the entire population of retailers in Wales under the relevant SIC codes.

The weights were applied separately for retail businesses in each region (under the SIC codes 47(minus sub-codes 47.91 and 47.53) and takeaways (56.10/3)) in each region. The weights used in the analysis can be found in Annex D of this report.

Annual data for the population of SME businesses in Wales was sourced from Experian. For the calendar year 2018, the total number of SME businesses in the selected SIC codes, excluding SIC codes 47.91 and 47.53, was 7,909; for 2017: 7,813; for 2016: 7,768 and for 2015: 7,703. This information was used to produce separate weighting factors to estimate the number of bags in each year within the period of interest, thus adjusting for growth in the SME population since 2015.

The weights as shown in Annex D were calculated on the basis of the population of total SME retailers (N) divided by the number of businesses interviewed (n) in each region-sector category.

Bag estimates for years prior to calendar year 2018 were based on the responses of retailers active in the years in question, whose responses were grossed up to the total population of all SME retailers (within SIC codes of interest) for the respective year. In the absence of any other option, we have assumed in our analysis that those SMEs responding to our survey about the carrier bags they issued in previous years are representative of businesses active in those years.

Combining the results with those obtained in the PIR to produce a time series: plastic SUCBs issued in 2011-18

As described in Section 2, it was agreed with the Welsh Government to produce two time series for plastic SUCBs issued in Wales In 2011-18, one based on the estimation approach used in the PIR ('PIR method'), and a second, using the revised estimation approach developed in this Study ('2019 method').

PIR method

To use the 'PIR method' to estimate the plastic SUCBs issued for 2011-18, we examined what the figures for the years covered by this Study (2015-18) would have been excluding

data from Aldi, Iceland and Lidl, before combining the results with original estimates from the PIR for the period 2011-14.

2019 method

Assessing the plastic SUCBs issued for 2011-18 based on the '2019 method' required additional analysis to estimate the number of SUCBs issued by Aldi, Iceland and Lidl in the period covered by the PIR (2011-14). The estimates could then be added to the original PIR estimates before combining the revised results with the plastic SUCB estimates (2015-18).

To estimate the bags issued by Aldi, Iceland and Lidl in 2011-14, each supermarket's percentage share of the overall number of plastic SUCBs issued in Wales in 2015-16 (the year closest to the PIR years) was assumed to be representative of their percentage share of plastic SUCBs issued in 2011-14. The estimates were then refined to account for the growth in market share of Aldi, Iceland and Lidl. This was achieved by expressing the overall market shares of Aldi, Lidl and Iceland in 2012, 2013 and 2014 as a percentage of that in 2015 and downscaling the initial plastic SUCB estimates for 2011-14 on that basis. Finally, the figure for 2011 was estimated assuming the percentage reduction in plastic SUCBs supplied by Aldi, Lidl and Iceland between 2011 and 2012 was the same as that observed for the other seven large supermarkets overall, as reported to WRAP.

Analysis to update the PIR estimates was repeated with alternative assumptions to test the sensitivity of the results. This included producing estimates for Aldi, Lidl and Iceland for 2011-14 based solely on their estimated percentage contribution to plastic SUCBs in 2015-16 in Wales, analysis based solely on changes in market share during the period, analysis on the basis of their average contribution to plastic SUCBs in Wales in 2015-18, and a combination taking into account market share changes and the contribution of the three supermarkets to the total number of plastic SUCBs issued. The overall time series and narrative from the data was similar, regardless of the method employed, but the hybrid approach described in the previous paragraph was preferred because refinement to account for market share changes minimised the risk of over-estimation.

Annex D: Weighting

Each response to the SME survey was assigned a weight based on the region and SIC code (retailers or takeaways) from which the case was drawn. The table below shows the weights used for the SME survey responses (2018 weight), and those used in estimating the number of bags issued in 2017-18, 2016-17 and 2015-16.

	Retail code 47 (minus codes 47.53 and 47.91)			Take away and mobile food shops		
	Population (N)	Interviewed (n)	Weight (N/n)	Population (N)	Interviewed (n)	Weight (N/n)
2018						
North Wales	982	170	5.776470588	327	43	7.604651163
Mid and West Wales	1143	173	6.606936416	386	35	11.02857143
South West Wales	1443	201	7.179104478	686	48	14.29166667
South East Wales	2079	179	11.61452514	863	41	21.04878049
2017-18						
North Wales	955	168	5.68390456	336	42	7.994766087
Mid and West Wales	1111	172	6.461931566	396	33	12.01104141
South West Wales	1403	196	7.159040686	704	42	16.7718946
South East Wales	2022	173	11.68565222	886	38	23.32031962
2016-17						
North Wales	940	166	5.660280187	342	41	8.339198825
Mid and West Wales	1094	167	6.548838628	404	32	12.61240067
South West Wales	1381	196	7.04441267	717	39	18.39161814
South East Wales	1989	170	11.70146122	902	37	24.38762476
2015-16						
North Wales	917	165	5.555589869	351	41	8.572696392
Mid and West Wales	1067	165	6.466435051	415	30	13.82991775
South West Wales	1347	194	6.943320857	737	39	18.90658345
South East Wales	1941	167	11.62092376	928	35	26.50307701

Separate weights were required for previous years as the populations and number of respondent businesses operational in previous years differs to 2018. The weighting methodology is described in Annex C.

Annex E: SME Questionnaire

Introduction

[Interviewer to read out] Good Morning / Afternoon

My name is ...and I'm calling from Winning Moves on behalf of the Welsh Government. We're carrying out some work on single use carrier bag usage in Wales. Can I speak to the manager / owner? (or someone with a remit for monitoring and purchasing carrier bags for your business?)

When put through to the manager / owner / relevant person:

My name is ...and I'm calling from Winning Moves on behalf of the Welsh Government. We're carrying out some work on single use carrier bag usage in Wales to help inform future policy in this area.

The conversation should take between 10 to 15 minutes and I'd like to get an understanding of your business profile, the type and quantity of carrier bags you offer at the point of sale, carrier bag trends and observations on customer behaviour.

If required:

[If respondent asks why this work has been commissioned] Welsh Government has commissioned this work because they want to understand the number and types of bags offered by businesses at the point of sale and to understand retailers' views on the carrier bag charge. This will help inform Welsh Government policy in the future.

Where did you get my details from? Your details were provided through a commercial database. We comply with General Data Protection Regulations (GDPR) requirements – all data collected from those that participate in this research will be stored and shared securely.

Can I speak to you about this now? [Record outcome]

Ask all: Before we proceed, would you like to answer this survey in English or Welsh? [If Welsh, ask respondent for a convenient time to call back and explain a colleague who speaks Welsh will call them back.]

This call will be recorded for training and monitoring purposes and all data will be anonymised before reporting and will be stored securely in accordance with data protection regulations. Are you happy to continue? Y/N

Eligibility and quota questions

1. Do you ever provide any type of carrier bags (plastic, paper, fabric) to your customers in Wales?

Yes	1	
No, we stopped issuing carrier bags after April 2015	2	Route to Q2
No, we stopped issuing carrier bags before April 2015	3	Route to Q3
We have never issued carrier bags	4	Route to Q4

2. Which year since April 2015 did you stop offering any type of carrier bags? [Select one only]

2015	1	Route to Q5
2016	2	Route to Q5
2017	3	Route to Q5
2018	4	Route to Q5

3. Why did you stop offering carrier bags before April 2015? [Capture WHEN they stopped issuing them as well] [Routing instruction: close interview]
4. Why has your business never issued carrier bags? [Capture verbatim] [Routing instruction: close interview]
5. Has the business been in existence and under the same ownership before 6th April 2015?

Yes	1	Route to Q7
No	2	Route to Q6
Don't know	3	Route to Q7

6. Since which month and year has your business been established? [Capture verbatim]

Profile

7. I'd like to ask a question about the number of sites you operate and the nature of the management of these sites. Which statement best reflects your business?

We are a business operating from a single site	1	Continue
We are a business operating from more than one site. This is the main site / head office	2	Continue
We are a business operating from more than one site. This is the not the main site / head office	3	Ask to be put through to main site / head office
We are a franchise, run independently of the franchise owner	4	Continue
We are a franchise, run by the franchise owner	5	Ask to be put through to franchise owner

8. What type of retail outlet are you?³⁹ [Capture verbatim and code]

Predominantly food	1
Non-specialised stores or department stores	2
Textiles, clothing and footwear	3
Household goods stores	4
Other specialised stores	5
Non-store retailing (e.g. online)	6
Don't know	7

³⁹ [List of retail outlets from ONS.](#)

9. What is your role [Capture verbatim]

10. How many people are employed at your site on:

a) a full-time basis?

b) a part-time basis?

		Full-time	Part-time
1, just myself	1		
2 - 4	2		
5	3		
6 – 10	4		
11 – 24	5		
25 – 49	6		
50 – 99	7		
100 – 49	8		
150 - 199	9		
200 – 250	10		
250+ (please state how many employees)	11		
Don't know	12		
None	13		

11. Do you trade....? [Read out, multiple choice]

On the high street / town / city centre	1
In a retail park	2
In a village / rural setting	3
Other	4
Don't know	5

SKIP THIS QUESTION IF THEY'VE SELECTED NON-STORE RETAILING IN Q9

12. Do you also trade online?

Yes	1
No	2
Don't know	3

Carrier bag usage: types, quantity, and charge

13. What types of carrier bags do you offer and how much do you charge for each?
 [Read out. Multiple response]

Bag type	Code	Cost
Single use (plastic)	1	
Single use (paper)	2	
Single use (biodegradable / starch)	3	
Reusable thick plastic (bag for life) that is replaced for free of charge by the retailer and normally retails between 5 – 10 pence	4	
Reusable bag (made from fabric such as canvas, woven synthetic fibres, or a thick plastic) that is more durable than disposable plastic bags, allowing multiple use	5	
Very lightweight plastic bags (typically used for unwrapped or loose food items such as fruit and veg, seeds or medicines)	6	
Other (write in)	7	
Don't know	8	

[If required: By single-use carrier bag, I mean any new bag used to carry goods which are sold, regardless of what they are made from - plastic, paper, degradable plastics or natural starch, regardless of whether or not they have handles and which are subject to the single use carrier bags charge in Wales. A single use carrier bag is any bag which,

although it may be used more than once, is not specifically designed for multiple re-use and is not replaced for free by the retailer when worn out].

ASK ALL

14. Within the period...

- January 2018 – December 2018⁴⁰
- April 2017 – March 2018
- April 2016 to March 2017
- April 2015 to March 2016

...how many of the following bags have you sold? [ROUTED FROM Q13 FOR EACH BAG TYPE SELECTED AND Q6 ON YEAR ESTABLISHED, SO ONLY BRINGS UP RELEVANT YEARS AND BAG TYPES]. [N.B. For each type of bag, capture a figure for each year].

[ROUTING: If a respondent is unable to provide this information over the telephone, we will email an Excel version of the table below, or if they cannot answer the question route to Q17 and collect estimates]

[ROUTING: If a respondent can answer this question, SKIP TO Q17]

⁴⁰ For the piloting phase this will be January 2018 – October 2018. A question will be added at the end of the questionnaire on whether we can re-contact them in January 2019 to collect data for November and December 2019.

Bag type	January 2018 – December 2018	April 2017 - March 2018	April 2016 – March 2017	April 2015 – March 2016
Single use (plastic)				
Single use (paper)				
Single use (biodegradable / starch)				
Reusable thick plastic (bag for life) that is replaced for free of charge by the retailer and normally retails between 5 – 10 pence				
Reusable bag (made from fabric such as canvas, woven synthetic fibres, or a thick plastic) that is more durable than disposable plastic bags, allowing multiple use				
Very lightweight plastic bags (typically used for unwrapped or loose food items such as fruit and veg, seeds or medicines)				
Other (write in)				
Don't know				

15. The period January to March covers a quarter of the calendar year – do you issue a quarter of your bags in this time period?

Yes	1
No – Capture percentage	2
Don't Know	3

16. [IF UNABLE TO PROVIDE AN ANNUAL FIGURE AT Q14] At your site in Wales, about how many [ADD BAG TYPE FROM Q13] would you say the business provides to customers in an average year / month / week? [COLLECT EXACT NUMBER AND CODE]

Response option	Code	Time period	Response
Exact number	1	Year / month / week	Write in
Estimate			
Fewer than 10	2	Year / month / week	
10-24	3	Year / month / week	
25-49	4	Year / month / week	
50-74	5	Year / month / week	
75-99	6	Year / month / week	
100-249	7	Year / month / week	
250-499	8	Year / month / week	
500-749	9	Year / month / week	
750-999	10	Year / month / week	
1000-1499	11	Year / month / week	
1500-1999	12	Year / month / week	
2000-3000	13	Year / month / week	

Other (please state how many)	14	Year / month / week	
Don't know	15	Year / month / week	

17. Are there any particular times of the year (perhaps seasonal or when you have promotion) when customers tend to purchase more bags from you? [Prompt: such as Christmas / Easter / Mother's Day / Father's Day / Halloween / Guy Fawkes / Public Event (Sport / Royal) / Bank Holidays / Weather] [Capture Verbatim]

18. Where do you report this information, if at all?

On our website	1
In-store	2
We don't report this information	3
Don't know	4

19. Are there any barriers to you reporting this? [Capture verbatim]

20. Thinking about the types of bags you offer, have you seen an increase or decrease in the following offered at the point of sale within the last 12 months: [Voxco to bring up previous response i.e. eliminate bag types from the table which are not offered by the retailer. For respondents who stopped providing carrier bags in the last 12 months, they will not be asked this question (it will be routed from their response in Q1)]

	Increased a lot	Increased a little	Stayed the same	Decreased a little	Decreased a lot	Don't know
Single use (plastic)						
Single use (paper)						

Single use (biodegradable / starch)						
Reusable thick plastic (bag for life)						
Reusable bag (made from fabric such as canvas, woven synthetic fibres, or a thick plastic)						
Very lightweight plastic bags (typically used for unwrapped or loose food items such as fruit and veg, seeds or medicines)						
Other bag						

ASK Q21 WHERE BAGS HAS INCREASED A LOT / INCREASED A LITTLE

21. Would you be able to provide an estimate of how much of an increase you have seen in the number of these bags that you have provided to customers (since the charge was introduced)? [Capture open end]

ASK Q22 WHERE BAGS HAS DECREASED A LOT / DECREASED A LITTLE

22. Would you be able to provide an estimate of how much of a decrease you have seen in the number of these bags that you have provided to customers (since the charge was introduced)? [Capture open end]

23. a) How much does the business spend on [ADD TYPE OF BAG] to supply to customers in Wales, per year / month / week? [Capture amount] [Again, if the

respondent doesn't know then ask them to find out and we will call them back to collect this information.]

b) Do you expect this amount to increase, decrease or stay the same within the next 12 months?

[N.B. For respondents who stopped providing carrier bags since April 2015, they will not be asked this question as it will be routed from their response in Q1]

[Voxco only to bring up bag type respondent selected]	Monthly spend on bags	Increase / decrease / stay the same
Single use (plastic)		
Single use (paper)		
Single use (biodegradable / starch)		
Reusable thick plastic (bag for life)		
Reusable bag (made from fabric such as canvas, woven synthetic fibres, or a thick plastic)		
Very lightweight plastic bags (typically used for unwrapped or loose food items such as fruit and veg, seeds or medicines)		
Other bag		

24. Thinking about the charge going forward, which of the following statements is closest to your view? (Single code)

We are happy to see the charge continue as it is	1
We are happy for the charge to continue, but we would like to see some changes	2
We think the charge should be removed	3
Something else (write in)	4
We don't have a view	5

25. I will now read a number of statements regarding single use carrier bags and bags for life. For each statement, please indicate the extent to which you agree or disagree on a 1-5 scale, where 5 is strongly agree, and 1 is strongly disagree and 3 is neither agree, nor disagree and why? [STATEMENTS WILL BE ROTATED]

	Strongly agree – Why?	Agree – Why?	Neither agree nor disagree – Why?	Disagree – Why?	Strongly disagree – Why?
The single use carrier bag charge should be increased further to incentivise using bags for life	1	2	3	4	5
Single use carrier bags should be prohibited	1	2	3	4	5
Bags for life help the environment	1	2	3	4	5
Retailers should be required to donate the proceeds from plastic bags for life to charity as is required for single use carrier bags	1	2	3	4	5
Bags for life should NOT be brought under the same regulations as single use carrier bags or be subject to the same charge	1	2	3	4	5

26. Which of the following statements reflects the position of your business: [NOTE: THIS IS SPECIFICALLY ABOUT SUCBs WHEREAS THE SCREENING QUESTIONS AT THE OUTSET OF THE INTERVIEW ARE ABOUT ALL BAGS]

We have never offered single use carrier bags	1	GO TO Q31
We have already phased out single use carrier bags		GO TO Q28 AND THEN Q29 SKIP Q30
We currently offer single use carrier bags, but are considering phasing them out for customers	2	GO TO Q30 AND THEN Q31
We currently offer SUCBs and have no plans to phase them out	3	GO TO Q31

27. When did you stop offering SUCBs? [Capture month and year]

28. Why did you stop offering SUCBs? [Capture verbatim] [Route to Q30]

29. What is your timeframe for phasing out SUCBs? [Capture verbatim]

30. Ignoring VAT and focusing just on the net proceeds from the charge, what proportion of the charge would you say the business sets aside for charitable donations and what proportion for general administration/business costs? A broad estimate is fine. [ROUTING: ONLY ASK THOSE THAT ANSWERED THEY PROVIDE SUCBs (Q13) OTHERS GO TO Q37]

	Charity (a)	Administration (b)
0% (none)	1	1
100% (all)	2	2
Write in exact estimate if between 1-99%	3	3
Don't know	4	4
Refused	5	5

31. You said the business uses some of the net proceeds to cover general administration and business costs. What sorts of admin/business costs would this include? [if any administrative charges reported in Q31]

Cost of bags	1
Reporting	2
Staff training	3
Communicating the charge to the customers	4
Other (write in)	5
Don't know	6
Refused	7

32. Thinking about the proceeds that you donate to charity, how many different organisations does the business make charitable donations to? [skip if no charitable donations reported in Q30]

1	1
2	2
3	3
4	4
5+ [state how many]	5
Don't know	6
None	7

ASK WHERE CODED 1-5, OTHERS GO TO Q37

33. Which of the following best describes the charity or charities that your business donates to (using proceeds raised through the bag charge)? [skip if no charitable donations reported in Q30] [Select all that apply]

Environmental	1
Local Community Groups	2
Homelessness	3
Health and disability	4
Opportunities for young people	5
Own in-house foundation/charity	6
Other (write in)	7
Don't know	8

34. What would you say were the main reasons why the business chose to donate to this charity/these charities? [skip if no charitable donations reported in Q30] [Select all that apply]

Pre-existing relationship/given to them before	<input type="checkbox"/> 1
Was approached by a charity	<input type="checkbox"/> 2
Heard of the charity through networks/peers	<input type="checkbox"/> 3 <input type="checkbox"/>
Talked to employees/chose charity with employees	4
Talked to customers/chose charity with customers	<input type="checkbox"/> 5 <input type="checkbox"/>
Did a general search to find a good cause you believe in	6
Other (write in)	<input type="checkbox"/> 7
Don't know	<input type="checkbox"/> 8

35. Would you say that the charitable donation that the business makes as part of the bag charge is...? [skip if no charitable donations reported in Q22]

...in addition to your existing donations to good causes	<input type="checkbox"/> 1
...in place of other donations to good causes that you have made in the past	2
...the only donation that you make to good causes	3
Don't know	4

ASK ALL

36. Could you please tell me the approximate turnover (or total sales revenue) of the business in your last financial year? Please answer in relation to the business in Wales only (if the business operates across multiple countries)? [Single code]
 [Capture figure and code]

Exact figure	£
Code	
Under £50k	1
£50k-£100k	2
Over £100k up to £200k	3
Over £200k up to £300k	4
Over £300k up to £500k	5
Over £500k up to £750k	6
Over £750k up to £1m	7
Over £1.0m up to £5m	8
Over £5.0m up to £10m	9
Over £10m up to £15m	10
Over £15m up to £20m	11
Over £20m	12
Refused	13
Don't know	14

37. In a typical year, how many days a year is your business closed? (e.g. Bank Holidays, Good Friday, Easter Sunday, Christmas Day, Boxing Day, New Years Day)

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9+ (state how many days if more than 9)	9
Don't know	10

Closing

Thank you, that covers all my questions. Before I go, would it be ok for my Research Manager to call you back if I've missed anything or to verify your answers? Yes / No

Would you like to take Winning Moves number or the Market Research Society freephone number in case you wanted to check anything about the company or the work we are doing?

Winning Moves: 0121 285 3800

Market Research Society number 0800 975 9596.

Thank you and close.

Annex F: Welsh Government letter inviting large businesses to participate

Dear Sir / Madam

The Welsh Government has commissioned an independent research agency Winning Moves (www.winnigmoves.com) to carry out research with retailers across Wales to understand the number and types of bags offered by businesses at the point of sale. We are writing to inform you that this activity is taking place and you might be contacted by Winning Moves to participate in this study.

The overall aim of this study is to provide the Welsh Government with robust information on current consumer and retailer attitudes and behaviour since the introduction of the Welsh single-use carrier bag (SUCB) charge. Data will be collected on levels of carrier bag usage in Wales. The findings will be used to help with the monitoring of the policy and identify whether changes are required and may be required to meet a European Commission Directive on reporting usage per head of population.

There will be two parts to this study. Winning Moves will send you an Excel spreadsheet to complete asking for the numbers of carrier bags sold at the point of sale between 2015 to 2018. This will then be followed up with a telephone interview to take place in January 2019. Broadly, the questions will cover:

- Business profile
- Whether there have been any increases or decreases in the types of bags offered at the point of sale (e.g. single-use plastic / paper / biodegradable bags, reusable thick plastic bags and reusable fabric bags)
- Where applicable, the types and quantities of very lightweight plastic bags for unwrapped / loose food items supplied not at the point of sale;
- Understanding the process for handling of proceeds raised through sales of SUCBs;
- Understanding the attitudes and observations of retailers on SUCBs.

Please note that all responses are anonymised and treated in confidence. If you require any further information about this study or would like to participate, please contact [REDACTED] at [REDACTED] or [REDACTED]. If you wish to verify this study, please contact [REDACTED] at Welsh Government at: [REDACTED] or [REDACTED].

We do hope you are able to contribute to this important piece of work.
Yours sincerely,

[REDACTED]
Knowledge and Analytical Services, Welsh Government

Annex G: Tables sent to large businesses for completion prior to interview

Bags Sold:

Within the following time periods, how many of the following bags listed in the table below, have you sold in Wales?

Type of bag	Jan 2018 - Dec 2018	April 2017 – March 2018	April 2016 - March 2017	April 2015 - March 2016
Single-use (plastic)				
Single-use (paper)				
Single-use (biodegradable / starch)				
Reusable thick plastic (bag for life)				
Reusable plastic (made from fabric such as canvas, woven synthetic fibres or a thick plastic) - Heavy duty				
Reusable plastic (made from fabric such as canvas, woven synthetic fibres or a thick plastic) – Freezer				
Very lightweight plastic bags (typically used for unwrapped or loose food items such as fruit and veg, seeds or medicines)				
Other bag (please specify)				

What proportion of your 2018 bag sales were in January to March 2018 (regardless of bag type)?	
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Spend:

How much does the business spend on the following types of bag(s) to supply to customers in Wales?				
Do you expect this amount to increase, decrease or stay the same within the next 12 months?				
Type of bag	Weekly spend on bags	Monthly spend on bags	Annual spend on bags	Increase / decrease / stay the same
Single-use (plastic)				
Single-use (paper)				
Single-use (biodegradable / starch)				

Reusable thick plastic (bag for life)				
Reusable plastic (made from fabric such as canvas, woven synthetic fibres or a thick plastic)				
Very lightweight plastic bags (typically used for unwrapped or loose food items such as fruit and veg, seeds or medicines)				
Other bag (please specify)				

Annex H: Discussion guide for online discussion board

Joining screen

Welcome to the research about shopping habits in Wales and thanks for joining us.

The first time you visit this page, click the 'Get started' button, then enter the email address we used to invite you. Next you will be asked to complete a few profile questions, along with your password. NOTE: the second time you log in, enter your email address and your password.

The research is anonymous – when you choose a username, please do not display your name in full. Your username is how you will appear to other participants.

About the research

Key dates

This online platform is going to be open until Tuesday 30th October and new questions will go live in five daily batches (Monday, Tuesday, Wednesday, Thursday and Friday). Please log-in regularly to keep up with everyone else and remember to look out for follow up questions from us once you've given your initial responses.

What do we need from you?

At points you will be asked some quick survey questions that only require a tick box; but on the whole this is a discussion forum so the more detail that you can give us in your responses, the better. If your responses are too short then you may receive a friendly nudge from the moderators to give us more detail ;-)

Tech Support

Click on the 'help' button if you need technical support, and you can always contact us at phil@icaro.uk.com

Things to remember:

- There are no right or wrong answers.
- For many of the early activities you'll be having a private one to one discussion with the moderator. Towards the end of the process there will be more discussions with other participants in an 'open forum'. This will be made clear before each question.
- Bear in mind that new activities and questions will appear as you complete questions - so even if you just see one in your dashboard initially, be sure to check again once you complete a question to see if another one is waiting for you

Introductory question

Just before you get going, make sure that you've had a quick look at the 'about this research' tab where we've set out some guidance and handy tips about the research.

The really important thing to note is that questions will appear in batches across the week, not all at once. Keep looking out for new questions in your dashboard, and also for responses from the moderators.

As this is a Government-funded piece of research, we've also included a 'privacy policy' tab.

Just to kick off, write something (as brief as you'd like) to say that you've read the information, seen the 'about this research' tab, and you think you're in the right place!

THE TASKS WENT LIVE IN NUMBERED BATCHES AS FOLLOWS:

1. Your shopping (Go live: Monday am)

- To start us off, tell us about the shops in your area [MODERATOR PROMPTS: ensure coverage across food and non-food shops (i.e. clothing, electronics, DIY, cosmetics/pharmacy)]
- Poll: Overall, how would you rate the range of places to buy food from where you live?
 - Very good
 - Fairly good
 - Fairly limited
 - Very limited
- Poll: And, overall, how would you rate the range of places to buy non-food items where you live
 - Very good
 - Fairly good
 - Fairly limited
 - Very limited
- Tell us a bit more about your answers to the two poll questions – in particular, are there more/different types of shops that you'd like to see locally, and why? Please answer for both food and non-food.
- Do you have a routine for shopping (e.g. always at the weekend)? [MODERATOR PROMPT: does it vary for food and non-food shopping?]
- Thanks for your responses so far!! Look out for any follow up questions from us, and the next batch of questions that will go live Tuesday morning.

2. Your most recent big food shop (Go live: Tuesday am)

- Thinking about your food shops over the weekend (or in the week before if you didn't do any over the weekend). Where did you shop, and what for?
[MODERATOR PROMPT: was it a large shop or smaller/top up shops?]

- [IF SHOP IN-STORE] Tell us about the bags that you used. Did you bring these from home with you or buy some at the store? [MODERATOR PROMPT: How many bags did you use (an estimate is fine)?]
- [IF SHOPPING DELIVERED] The last time your online shop was delivered, did it come with or without carrier bags? [MODERATOR PROMPTS: How many bags did the shopping come in (an estimate is fine). And were you given the option, when placing your order online, to have the food delivered with or without carrier bags?]
- If you still have these bags at home, can you take some photos of them and show us using the 'upload' function. [MODERATOR PROMPT IF RESPONDENT SAYS THEY CAN'T UPLOAD: If you don't have them to hand, just tell us what kind of bags they are]. [MODERATOR PROMPTS: What would you call these bags in your own words [MODERATOR NOTE: we're looking here for descriptions like bags for life, reusable bags, single use/thin plastic, paper etc. and the perceived differences – if any - between them].

3. Your most recent non-food shops (Go live: Tuesday am)

- Now tell us about any clothes shopping you did over the weekend (or the last time you did this). What did you go shopping for, and where?
- Also tell us about any other kind of shopping you did (e.g. for DIY, electricals, cosmetics/ pharmacy, etc). What did you go shopping for, and where?
- Thinking about your most recent clothes shop - did you take bags to the store? Did you get any in store? [MODERATOR PROMPT: IF BUYING NEW BAGS IN STORE – did you get a bag at each shop you purchased something in?]
- And thinking about your most recent shop for DIY, electricals, cosmetics/pharmacy, etc. Did you take bags to the store?
- If you still have these bags at home, can you take some photos of them and show us using the 'upload' function. [MODERATOR PROMPT IF RESPONDENT SAYS THEY CAN'T UPLOAD: If you don't have them to hand, just tell us what kind of bags they are]. [MODERATOR NOTE: we're looking here for descriptions like bags for life, reusable bags, single use/thin plastic, paper etc. and the perceived differences – if any - between them].

- Thanks for your responses so far!! Look out for any follow up questions from us, and the next batch of questions that will go live on Wednesday morning.

4. Bags (Go live: Wednesday am)

- We'd now like to focus in on bags and ask you some questions about this. Have a look at the following images of bags and, for each, tell us which you think are bags for life. Tell us why. How have you made your judgement?
- Poll: Thinking about when you go to the supermarket to do a large food shop, which of the following statements would you say best applies to your use of reusable bags? Tick one
 - I often forget to bring them / bring enough
 - I sometimes forget to bring them / bring enough
 - I rarely forget to bring them / bring enough
 - I never forget to bring them / bring enough
 - I don't use reusable bags for this type of shop
- Poll: And now thinking about top up food shops, which of the following statements would you say best applies to your use of reusable bags? Tick one
 - I often forget to bring them / bring enough
 - I sometimes forget to bring them / bring enough
 - I rarely forget to bring them / bring enough
 - I never forget to bring them / bring enough
 - I don't use reusable bags for this type of shop
- Tell us about your reusable bag use when it comes to food shopping. For example, how many times, or for how long, do you typically re-use bags for? [MODERATOR PROMPT: probe for a number, or a time period. Also, does it depend on the type of reusable bags? Do you use/keep some for longer than others? Which/why?]
- Do you have a particular place for storing them?
- Poll: Thinking about when you do non-food shops, for example for clothes or trips to the high street/shopping centres, which of the following statements would you say best applies to your use of reusable bags? Tick one
 - I often forget to bring them / bring enough
 - I sometimes forget to bring them / bring enough

- I rarely forget to bring them / bring enough
- I never forget to bring them / bring enough
- I don't use reusable bags for this type of shop
- How does your use of reusable bags differ for non-food shops, compared to when you go to the supermarket? Is it easier or more difficult to use them for non-food shops? Do you prefer to take bags from the store for clothing items [MODERATOR PROMPT: why do you say that?]
- Do you think of the bags you get from non-food shops differently, or use them differently to bags for food shopping?
- How do you decide when it's time to dispose of a reusable bag?
- What would you say are the main reasons why you don't use reusable bags for longer?
- Are you aware that bags for life can be replaced for free by taking your old bag back to the retailer? [MODERATOR PROMPT: Have you ever done this? What stops you from taking it back to the store to get a new one for free?]
- How do you dispose of reusable bags? Do you typically throw them away, recycle it or take it back to the retailer to swap it for a new one?
- Thinking now about single use/thinner plastic bags. Do you still get these in store / use these? In your view, how do these differ to reusable bags for life?
- How do you use them, e.g. do you use these again or dispose of them straight away? [MODERATOR PROMPT: how many times do you re-use them? how do you dispose of them?]
- Thanks for your responses so far!! Look out for any follow up questions from us, and the next batch of questions that will go live on Thursday morning.

5. The bag charge (Go live: Thursday am)

- To start this section off, tell us your views about the bag charge that operates in Wales. [MODERATOR PROMPT: do you think this charge cover all types of carrier bags or just single use carrier bags?]
- Poll: Thinking about your food shopping, how has your use of reusable bags changed since retailers started charging for bags? Do you...
 - Re-use bags a lot more

- Re-use bags a little more
- Re-use the same amount of bags as before
- Re-use bags a little less
- Re-use bags a lot less
- I don't re-use bags at all for these shops
- Tell us a bit more about this answer – in particular, how has your bag use changed since the charge was first introduced? [MODERATOR PROMPT: Is it different or the same if you're doing a main shop or a top up shop? Thinking about your own bag use, do you think over time you are using more bags again, or less?]
- Poll: And now thinking about your non-food shopping, on the high street or at shopping centres, how has your use of reusable bags changed since retailers started charging for bags? Do you...
 - Re-use bags a lot more
 - Re-use bags a little more
 - Re-use the same amount of bags as before
 - Re-use bags a little less
 - Re-use bags a lot less
 - I don't re-use bags at all for these shops
- Tell us a bit more about this answer – in particular, how has your bag use changed since the charge was introduced? [MODERATOR PROMPT: Is it different or the same if you're doing a clothes shop or a shop for cosmetics products like shampoo, shower gel, etc]?
- Has the plastic bag charge had any impact on your attitudes towards plastics in general? [MODERATOR PROMPT: if yes, in what way? Can they recall doing anything differently in terms of their behaviour?]
- Over the last year, do you remember visiting any shops in Wales where you were given a carrier bag but were not charged for it? [MODERATOR PROMPT: for those who say yes, establish where this happened].
- As far as you are aware, what happens to the money that businesses charge for single use carrier bags? [MODERATOR PROMPT: What do you think of the retailers being able to choose the charity they give the money collected to? Should it just be reserved for environmental projects, or any charity?]

- The Welsh Government's policy on bag charges only relates to single use carrier bags, not reusable bags (like bags for life). Its intention is to encourage consumers to reuse bags rather than buy new ones. Do you think it has been successful in meeting this aim, or not? NB. this is an open discussion among participants and, once you give your answer, you will see what everyone else has commented. Please have a look at the comments of other participants in the research and start to comment on whether you agree or disagree. Here, the more we can generate a discussion between everyone, the better.
- From your perspective, what are the benefits of the scheme? This is an open-forum question. [MODERATOR PROMPT IF NEEDED: litter in town? Litter in green/open spaces/beach? Resource use/Environmental?]
- It has now been seven years or so since it was introduced (and a similar scheme has since been set up in England) - Have your views changed towards the scheme over time? If so, what did you think initially and what do you think now? This is an open-forum question where you will see other participants responses and they will see yours
- Thanks for your responses so far!! Look out for any follow up questions from us, and the next batch of questions that will go live on Friday morning.

6. The bag charge moving forward (Go live: Friday am)

- Are there any changes you would like to see to the scheme? Or information you'd like to hear more about?
- Thinking about the charge moving forward, would you support or oppose an extension of the charge so that it also covered all bags (i.e. bags for life as well as single use carrier bags)? Tell us why. This is an open-forum question.
- And thinking about the charge moving forward, would you support or oppose an increase in the level of the charge – for example to 10 pence - to keep encouraging consumers in Wales to re-use bags rather than buy new ones? Tell us why, and also give your thoughts on what level of charge you think would be required to act as a sufficient incentive. This is an open-forum question.

- Would you support or oppose charges on other types of single use plastics in Wales, e.g. plastic straws, or take-away coffee cups. Tell us why/why not. This is an open-forum question.

You've now reached the end of the research! Many thanks for your participation - and you will receive your 'thank you' payment for taking part shortly.

Use this space to give any feedback, or ask any questions, that you'd like. Or you can just leave it blank.