

Introduction of Single Use Carrier Bag Charge, Wales: Awareness of and Acceptance by Shoppers in Cardiff

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Acronyms

BBC	British Broadcasting Corporation
BRASS	ESRC Centre for Business Relationships, Accountability, Sustainability and Society
EA	Environment Agency
NI	Northern Ireland
UK	United Kingdom
UNEP	United Nations Environment Programme
WG	Welsh Government

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Executive Summary

On the 1st October 2011, the Welsh Government (WG) introduces the first mandatory charge for single use carrier bags in the UK through the implementation of the Single Use Carrier Bag Charge (Wales) Regulation 2010¹(the Regulations). The new charge is being introduced into Wales under powers conferred by sections 77 and 90 of, and Schedule 6 to, the Climate Change Act 2008 (the Act) an Act which extends to both England and Wales.

Under the Regulations, retailers will be required to charge a minimum of five pence for single use carrier bags, which meet the definitional requirements laid down in the Regulations. This definition includes plastic, paper, biodegradable and recyclable carrier bags. All retailers, not only those retailers that sell food and groceries, are affected by the Regulations, which apply equally to sales in store and on-line. The Regulations extend to goods purchased in Wales and goods delivered in a single use carrier bag to someone in Wales.

A group of researchers from the ESRC Centre for Business Relations, Accountability, Sustainability and Society (BRASS) at Cardiff University undertook a survey of public attitudes, awareness and acceptance of the new carrier bag charge.

Six hundred people were surveyed in Cardiff in four different sites across the city (Queen Street, the Hayes, Cardiff Bay Retail Park and the intersection of Albany Street and City Road) during one week in mid-September 2011.

They were asked a series of 10 questions to assess:

- Level of awareness of the introduction of the charge;
- Level of awareness of the extent of the charge in relation to shops and types of bag included;
- Agreement or disagreement with the charge,
- Their reasons for their position;
- Why they believed the WG had introduced such a charge; and
- What they would be willing to pay for carrier bags.

Key Findings:

- 85% of all respondents were aware that a carrier bag charge was to be introduced. Of this percentage, 41% knew that the charge would commence on the 1st October 2011.
- 60% of respondents believed that the charge applied only to plastic carrier bags but 51% identified that the charge would apply to all types of shops; whilst 27% believed that it applied only to supermarkets. Even those respondents who said it applied to all shops, many of their subsequent comments related to food outlets and supermarkets.
- 70% of the respondents agreed with the introduction of the charge, with 26% disagreeing. The remaining 4% had either no view, were undecided or were not interested.

¹ 2010 No. 2880 (W. 238)

- Of the 70% who agreed with the charge, the main reasons identified by them in support was the positive impact on the environment, improved litter control and a reduction in the use of plastic bags as well as a general reduction in waste generated.
- Of the 26% who disagreed with the charge, the main reasons identified by them was the additional cost on already expensive food bills and that the charge should not apply to items such as clothes or expensive goods.
- 38% of respondents said that they were willing to pay more than 5 pence for a carrier bag. This did depend on the quality of the bag and for some how the money from the bags would be used. 29% said 5 pence was the maximum amount they would pay and 6% said they would prefer it to be between 1 and 4 pence, whilst 24% said 0 pence was the maximum they would be willing to pay.
- Of the 53% of respondents who answered the question what would they do in response to the charge, 67% stated that they would take their own bag with them when they went shopping. 11% said that they would just have to pay the charge, whilst 6% said they would carry the goods somehow but gave no further details.
- Whilst 57% of respondents identified improving the environment as the reason why the Welsh Government introduced the charge, 13% believed that the reason the charge had been introduced was to raise money for the Welsh Government. It was viewed as a tax or as a means of dealing with the economic climate by bringing in additional revenue. Few respondents knew that the funds would not be returned to WG. Although, respondents did feel that they would be more willing to pay the charge if they were assured that the funds would be distributed to charities.

In summary, whilst the majority of the public surveyed, knew about the charge and were in agreement with it, too many of the respondents believed that the charge applied solely to plastic carrier bags. In addition, respondents in favour of the charge still expressed concerns about the reasons why the Welsh Government were introducing it and were unaware that the funds would not be returned to the government but that the government had recommended that the funds be given to charities. Respondents aware that the funds were to go to charity supported the charge.

1. Introduction

1. On the 1st October 2011, the Welsh Government (WG) introduces the first mandatory charge for single use carrier bags in the UK through the implementation of the Single Use Carrier Bag Charge (Wales) Regulation 2010²(the Regulations). The new charge is being introduced into Wales under powers conferred by sections 77 and 90 of, and Schedule 6 to, the Climate Change Act 2008 (the Act) an Act which extends to both England and Wales.
2. Under the Regulations, retailers will be required to charge a minimum of five pence for single use carrier bags, which meet the definitional requirements laid down in the Regulations. This definition includes plastic, paper, biodegradable and recyclable carrier bags. All retailers, not only those retailers that sell food and groceries, are affected by the Regulations, which apply equally to sales in store and on-line. The Regulations extend to goods purchased in Wales and goods delivered in a single use carrier bag to someone in Wales.
3. The Welsh Government believes that a charge of five pence is sufficient to alter people's behaviour (without putting an unnecessary burden on shoppers) and reduce the quantity of single use carrier bags.
4. The introduction of the charge follows the voluntary agreement between the British Retail Consortium and the 7 main grocery retailers with the UK Government. By May 2009, this agreement had resulted in a 48% reduction across the UK, with a 49% reduction in Wales on the number of single use carrier bags given out (against a 50% target) compared to 2006 figures (*WG, Consultation, 2010, 4*). However, it was felt that this was insufficient and that further action was required in order to adapt shopping habits to a level of improved sustainable consumption.
5. Whilst Wales is the first administration in the UK to introduce a mandatory charge, there is a growing interest in other jurisdiction to consider the role of a mandatory charge on carrier bags and the impact it may have on achieving environmental aims. Earlier this year, the European Commission launched a consultation (which closed in August 2011) on whether the European Union should tax or altogether ban plastic carrier bags, as part of a new consultation designed to tackle rising levels of plastic waste. The consultation also considered options on increasing the visibility of biodegradable packaging products, and boosting the biodegradability requirements for packaging. In contrast to Wales, where the charge applies equally to plastic and paper carrier bags, the European Commission consultation was restricted solely to plastic bags.
6. Both Northern Ireland and Scotland are now looking at whether or not to charge for plastic bags. In Scotland the consultation will begin sometime in the autumn of 2011 and

² 2010 No. 2880 (W. 238)

the Scottish Government have stated that they will consider legislating for a charge but only if need be.

7. In Northern Ireland the consultation process closes in October 2011. Similar to the Wales consultation process, they are consulting on the types of retailers to be covered by the charge, what type of bag should be included, the level of the charge/levy and enforcement and sanction provisions. The consultation proposes that the funds raised from the charge will be forwarded to the government (*NI, Consultation, 2011, 7*). This is in contrast to Wales, where the WG has recommended that the funds raised by the charge are distributed to charities. If passed, the charge is expected to be introduced in Northern Ireland by April 2013 (*NI, Consultation, 2011, 8*).

2. Background to Research

2.1 The Problem with Carrier Bags

8. It is estimated that 500 billion plastic carrier bags are used worldwide each year (*Spokas, 2007; Geographical, 2005*). In the UK alone, each year there are approximately 6.8 billion plastic bags handed out by retail shops (as of 2010). In 2009, an estimated 445 million carrier bags were used by shoppers from the major supermarkets in Wales alone (*WG, Consultation, 2010*). This is estimated to equate to 273 bags per household and excludes bags obtained for purchases other than groceries.
9. According to Keep Wales Tidy, 3.4 plastic bags are found in every kilogram of litter in Wales (*Waste Awareness Wales, 2011*). That is around 2.7% by weight of all litter (*WG, Consultation, 2010*). It costs Welsh local authorities an estimated £1million to clean up plastic bag litter every year.
10. Many single use carrier bags are made of oil based plastic, which is a non-renewable resource. Each plastic bag can take up to 500-1000 years to decompose, and may never break-down in landfill (*Waste Awareness Wales, 2011*).
11. Our countryside, rivers and even oceans are often littered by their presence and more than 1 million birds die each year as a result of plastic pollution. The United Nations Environment Programme estimates that there are 46,000 pieces of plastic litter floating in every square mile of ocean (*UNEP, 2006*).
12. A large amount of harmful emissions are emitted during manufacture, shipment and recycling of plastic bags. Even when they photo-degrade in landfill, the plastic from single-use bags never goes away, and toxic particles can enter the food chain and can be ingested by unsuspecting animals.
13. Paper carrier bags, which are often considered a more environmentally friendly alternative, also have environmental consequences as much of the pulp used for paper

shopping bags is virgin pulp because it is considered stronger. Paper production requires hundreds of thousands of gallons of water as well as toxic chemicals like sulphurous acid, which can lead to acid rain and water pollution. Even paper bags that come from a renewable source and are biodegradable require more energy than plastic bags to manufacture and transport.

14. Even starch based biodegradable and fully compostable bags use natural resources. If these are only used for one trip and not composted, these are a bigger waste of resources than conventional plastic carrier bags.

15. Every single use carrier bag, no matter what it is made of, is a waste of resources as they all need:

- ✚ Raw materials to produce them;
- ✚ Energy to be produced, therefore creating emissions;
- ✚ Transportation; and
- ✚ Disposal and in the case of plastic bags this is often to landfill.

16. Between 2006 and 2009, plastic bag use in the UK declined by about 40% to under 6.5 billion (*BBC, 2011*), however since the recession, plastic bag use is once again on the increase. The British Retail Consortium has accredited this increase to shoppers changing their method of shopping, with shoppers now making a number of short trips rather than a single big weekly shop (*The Guardian, 2011*). Yet in 2006, shoppers in the UK were taking home approximately 11 billion plastic bags, equating to more than 400 bags per household or 475 million plastic bags a month. Despite, the increase in 2010, UK shoppers are still taking home considerably less plastic bags than 5 years ago (*WRAP, 2011*).

2.2 Evidence from the Republic of Ireland

17. The Republic of Ireland introduced a levy in 2002 and evidence from Ireland has shown that a plastic bag levy can actually reduce plastic bag use. When the levy was first introduced, plastic bag use reduced from an estimated 328 per person to 21 per person overnight. Other countries, such as Italy, have adopted a more drastic approach by banning the use of certain types of plastic carrier bag.

18. In Ireland, however, the levy is significantly more than five pence. Since being introduced, the Irish Government has increased the charge from €0.15 (13p) to €0.22 (19p). Under the Waste Management (Landfill Levy) Regulations 2011³, the plastic bag levy can be amended once in any financial year by the application of the consumer price index plus an additional 10% at the discretion of the Minister for the Environment. The ceiling for the plastic bag levy is set at €0.70 or 61pence.

³ (SI No. 434 of 2011)

19. However, one issue with the levy in Ireland is that as people do reuse plastic bags for domestic waste disposal, Ireland witnessed an increase in bin liners and refuse sacks after the levy was introduced. Tesco increases sales in pedal bin liners by 77%, SuperQuinn say an 84% increase and SuperValue/Centra a 75% increase (The Times, 2008).

2.3 The Charge in Wales

20. The WG's primary aim identified in their June 2010 Consultation paper is to reduce the consumption of single use carrier bags in Wales. In addition, the charge has been introduced to:

- ✓ Encourage consumer behaviour change towards more sustainable consumption;
- ✓ Cut down on the wasteful use of resources;
- ✓ Improve local environment quality by reducing the highly visible litter from single use bags and reduce the potential contaminants left behind from fragments of bags;
- ✓ Protect wildlife from the potential hazards of discarded bags or fragments of bags; and
- ✓ Encourage waste reduction/prevention.

21. The Regulations set a minimum sum of five pence, which retailers across Wales must charge for single use carrier bags (reg. 6). No maximum sum is defined under the Regulations. A single use carrier bag is defined as one made from paper, plant-based material or natural starch and is not manufactured for multiple use (reg.3(2)) or is made from plastic, not intended for multiple use and is not classified as a 'Bag for Life' (reg.(3)(3).



“A single-use carrier bag is a bag that is not designed for substantial reuse and is often given out with the aim of transporting your goods home for just one trip.” (Welsh Government website for the Carrier Bag Charge)

22. The charge therefore, extends to bags composed of the following materials:

- ✓ Plastic;
- ✓ Paper;
- ✓ Part-plastic;
- ✓ Plant bases materials such as starch;
- ✓ Recycled; and
- ✓ Degradable, biodegradable and compostable bags.

23. The charge applies to a wide range of retailers from high street to local shops, from market stalls to charities, from takeaway restaurants to opticians (See Annex I for full list). It applies to all in store and online sales as well as to companies who sell and deliver goods to someone in Wales (reg. 4(b)), which therefore extends to companies based elsewhere in the UK that deliver goods by means of a carrier bag to someone in Wales. An example of this is where someone living on the border in Wales shops online with a supermarket located a few miles away but in England and their goods are delivered in single use carrier bags.

24. Under regulation 7 and Schedule 1, specific bags are exempt from the charge (See Annex II for full list) which includes bags for unwrapped food items for example fruit and vegetables, bags for uncooked raw meat and fish or small flat paper bags for greeting cards.
25. Local Authorities are responsible for administrating and enforcing the charge (reg.5). Where a retailer fails to charge the minimum sum for a carrier bag (reg.11(2)(a)) they could face a fixed penalty of £200 (Schedule 2) or a discretionary penalty of up to £5,000 (Schedule 3). They are permitted to make test purchases of goods for the purposes of ascertaining whether the shop is complying with the Regulations (reg. 14(2)(a)).
26. In Wales, shoppers are already used to some retailers charging for plastic carrier bags but not for items such as clothing, large scale products like game consoles, lamps or luxury items. They are also not used to paying for paper carrier bags. Therefore a team of researchers from the ESRC Centre for Business Relationships, Accountability, Sustainability and Society (BRASS) at Cardiff University wanted to find out the views and opinions of the public towards this charge.

3. The Research

3.1 The project

27. A team of researchers from BRASS analysed the introduction of the new charge in Wales in two distinct but inter-related phases. Phase I is an analysis of the attitudes, awareness and acceptance of the charge by the public, whilst phase II is an analysis of the attitudes of retail companies, their level of understanding of the regulations and WG guidance, how they have introduced the charge (including staff training and record keeping) and how they will disseminate the proceeds from the charge.
28. This report represents the findings from Phase I of the project on the public's attitude to the charge.

3.2 Methodology

29. Face-to-face surveys of six hundred members of the public were conducted by a group of surveyors from BRASS at four different sites across Cardiff in mid September 2011. The interviewees were randomly selected by the surveyors, who were of course reliant on members of the public agreeing to participate in answering the short survey questionnaire.

Excluded Bags

- ✓ Cloth;
- ✓ Jute;
- ✓ Cotton;
- ✓ Hessian;
- ✓ Hemp;
- ✓ Wicker;
- ✓ Heavy duty plastic; and
- ✓ Thick Plastic Bags for Life

Statistical Note

The survey sample is not a proportional representation of the population of either Wales or Cardiff. It is based on a random selection of 600 people in Cardiff, who were willing to complete the survey questionnaire.

The sample however does represent as close a proportional representation of the Wales gender demographics, which according to StatsWales is 51% female and 49% male. The sample represents 54% female and 46% male.

In Cardiff by June 2010, the population between the age of 16 and 64 (excluding students) was 196,800 of this figure 79% were employed (the survey captured 43%) and 8% unemployed (the survey captured 6%). Given the time of day of the survey (mid morning to mid afternoon), the number of employed respondents is likely to be less than the Cardiff employment percentage.

In 2009, the Welsh Government estimated that in Cardiff 16% of the population was of retirement age (SDR 40/2009, Statistical Focus of Age in Wales, 2009). Of the survey sample 19% classified themselves as retired.

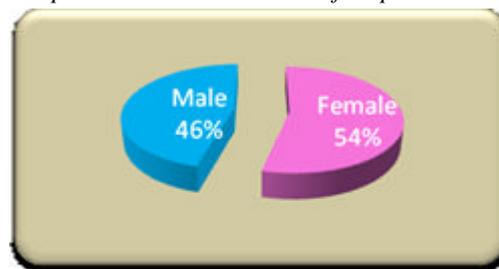
Statistical figures from StatsWales, 2010

30. The four sites (Queen Street, The Hayes, Cardiff Bay Retail Park and the intersection between Albany Street and City Road) were chosen to capture respondents within an area which offered as a wide as possible selection of retail outlets within the city. The four sites captured potential and/or actual shoppers from brand name stores, supermarkets, fast-food and take away outlets, clothing and charity shops as well as market stalls in both local and city centre locations.
31. Demographic information relating to gender, age group and employment status/sector was collected in addition to a further ten questions on their level of awareness of the introduction of the charge, whether they knew the extent of the charge in relation to shops and types of bag included. Respondents were further asked whether they agreed or disagreed with the charge, their reasons for their position and why they believed the WG had introduced such a charge. They were also asked what they would be willing to pay for carrier bags. (See Annex III for Survey Questionnaire)

3.3 The demographic breakdown of respondents

32. Females represented 54% of the respondents and males 46% (see Graph 1).

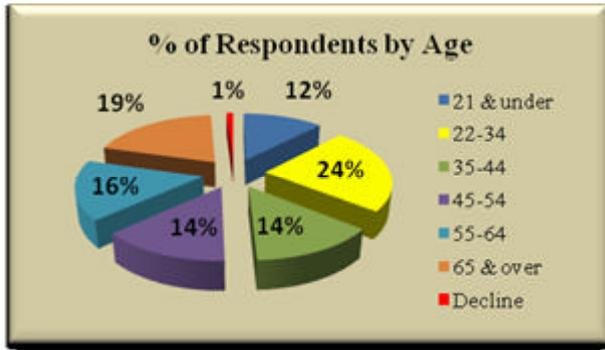
Graph1: Gender breakdown of respondents



33. The respondents represented the full spectrum of age ranges from 21 and under to over 65. The largest group were those aged between 22 and 34, representing 24% of the sample. The other age ranges were fairly represented with between 12 and 19% of respondents within the following age groups: 21 and under (12%); 35 to 44 (14%); 45 to 54 (14%); 55 to 64 (16%) and 65 and over (19%).

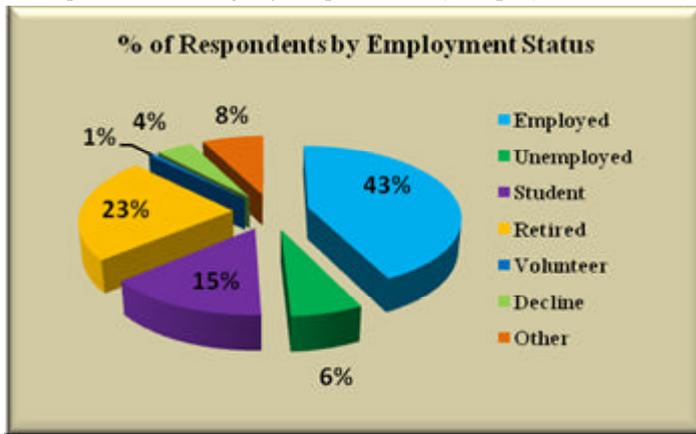
Only one percent of respondents declined to provide their age range (see Graph 2).

Graph 2: Percentage of Respondents by Age



34. The employment status of respondents is represented in Graph 3 once again there is a mix of employed, unemployed, students, retired, volunteers and other. The group classed as 'other' represents those who identified themselves as house-wives, house-husbands or carers. Four percent of respondents declined to state their profession or employment status.

Graph 3: Percentage of Respondents by Employment Status



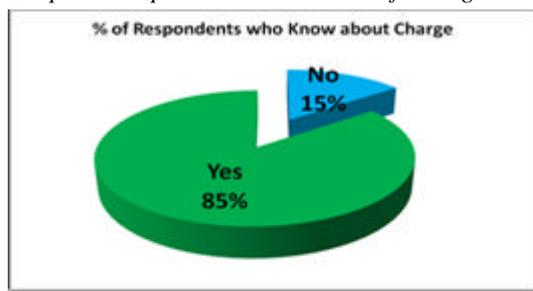
35. Respondents who identified themselves as employed were further broken down into the following sectors: Professional (49%); Public Sector (10%); Service Industry (29%); Trade (6%), Self-Employed (4%) and Charity (2%).

4. The Findings

4.1 Level of Public Knowledge

36. Of the 600 people interviewed, an overwhelming 85% of all respondents were aware that a carrier bag charge was to be introduced as illustrated in Graph 4.

Graph 4: Respondents Awareness of Charge



88% of women and 82% of men were aware of the charge.

Table 1: Awareness of Charge by Age Group

Age Group	Aware	Unaware
21 & Under	71	29
22-34	79	21
35-44	87	13
45-54	84	16
55-64	93	7
65 & Over	95	5
Decline	100	0

36. One potential reason for the reduced level of awareness amongst those under the age of 34 is the number of students captured in these age groups (71% of all respondents 21 & under and 22% of those aged 22-34), who may have only just moved to Cardiff to commence University. As a consequence they may be too new to both the City and Wales to be aware of the charge.

Respondents over 55 represented the highest percentage of awareness.

37. The accuracy of the knowledge began to decrease on further in-depth questioning. 60% of respondents believed that the charge applied only to plastic carrier bags. Whilst 21% correctly identified that the charge applied to all carrier bags. 13% used general terms from single use to standard to big bags and Bags for Life. 6% of the respondents did not know (Seen Annex IV, graph 5).

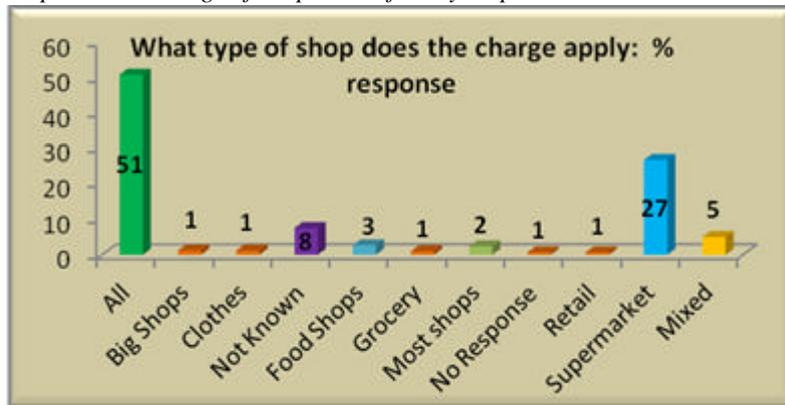
38. As the majority did not identify paper carrier bags, it is reasonable to assume that they did not make the same any connection between the charge and the reasons for the charge with paper carrier bags (see Section 4.2 for the reasons why the public agree or disagree with the charge).

39. More respondents did identify that the charge applied to all shops (51%) against 27% who thought it only applied to supermarkets. Eight percent of the respondents were unable to identify the types of shop, one percent did not respond to the question and remaining 13% used a number of different terms to identify shops from big or major shops, top brand names to low cost shops (see graph 6).

40. 41% of the respondents, who knew about the charge, knew that it would be introduced on the 1st of October 2011. A further 26% knew it would be introduced sometime in October. Twenty percent did not know when the charge was to be introduced and 3% thought it was not to be introduced until sometime in 2012 (see Annex IV, graph 7).

41. In addition, 71% of those who knew about the charge correctly stated that the minimum charge was 5 pence.

Graph 6: Percentage of shops identified by respondents

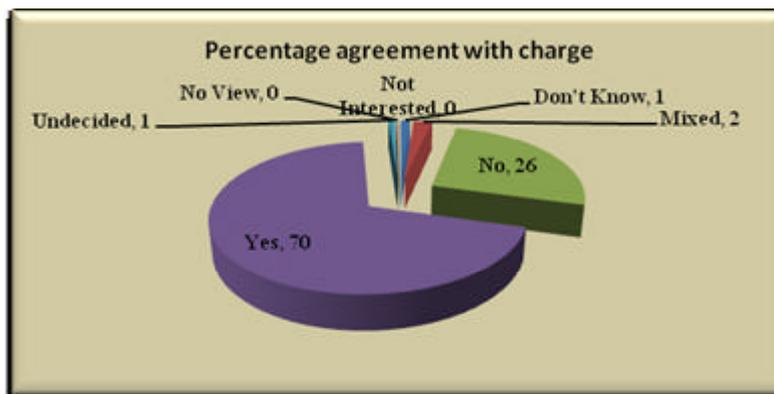


42. Overwhelming respondents had heard about the charge from either the media (television, radio and newspapers at 38%) or from shops and supermarkets (33%). 6% had heard about it from government advertising campaign and 8% via word of mouth, with 4% hearing about it from work.

4.2. Agreement with Charge

43. As illustrated in Graph 8, 70% of the respondents agreed with the introduction of the charge, with 26% disagreeing with the charge. The remaining 4% were either undecided, had no opinion or did not know. Of those who agreed, 56% were female and 46% were male. In contrast more men disagreed with the charge (51%) to 49% of women.

Graph 8: Percentage of respondents agreeing with charge



“It is time shoppers became responsible” Interviewee 75

“Make no difference, people use disposable as bin bags at home so have to buy black bags instead” Interviewee 312

44. The respondents gave a number of reasons as to why they agreed with the charge, these reasons were grouped in to the following categories:

- Behaviour change (for example to deter people from using plastic bags and encourage people to take their own bag when shopping);

"5p is not enough to make a difference" Interviewee 307

"They are a nuisance" Interviewee 456

"They are disgusting" Interviewee 523

"Cupboard full of them" Interviewee 227

"People should buy shopping bags or trolleys" Interviewee 214

"Be better to get rid of plastic bags all together" Interviewee 131

- Cleaner environment - people related this to reducing the amount of litter in our streets, beaches and countryside and therefore links in with one of the aims of the Regulations;
- Problems with plastic – respondents listed a number of problems that they considered the use of plastic posed, including the length of time it took to biodegrade and that in general there were too many plastic bags currently in use;
- Recycling – 44 respondents did consider that the charge would encourage people to recycle. Whilst the aims of the charge are not to encourage the recycling of carrier bags but more to encourage a reduction in the use of carrier bags and for the public to reuse bags, the study did not look at whether the public may in general associate this charge with wider waste issues.
- Environmental reasons – this was the most mentioned reason in favour of the charge, with 96 of the respondents mentioning this as the first

reason why they support the charge. This category included reasons such as plastic bags being bad for the environment to the charge helping to improve the environment.

- Raise awareness – linked to environmental reasons, respondents here identified that the charge would make people more aware of the impact their actions had on the environment.
- Reduce amount of waste to landfill – a small number of respondents (7) stated that too many plastic bags were thrown away in landfill.
- Reduce/Reuse bags – 68 of the respondents in favour of the charge either stated that they favoured the charge because it would either reduce the amount of bags used or it would encourage people to reuse existing bags.
- Too much waste – 54 respondents agreed with the charge because they felt that in general there was too much waste.
- Wildlife/Nature - other respondents stated that due to the negative impact plastic bags had on birds and wildlife in general they were in favour with the charge.

45. Only 1 respondent in favour of the charge identified climate change as one of the reasons why they were in agreement.

46. Of the 26% not in favour of the charge, the following are some of the reasons that they identified:

- Cost – 27% of those who disagreed with the charge raised cost as an issue. This was not merely the cost for the carrier bag but goods, particularly food, which they stated is expensive and this charge would be an additional cost.

- Destination of money – a small percentage (2%) of the respondents did raise questions about the final destination of the funds raised from the charge.
- Should be free – 16% of those who disagreed felt that as one was already spending money in a shop, a bag should be part of the customer service. This particularly applied to expensive items, clothing and large goods.

“5p too expensive” Interviewee 388

“Could make people do less shopping” Interviewee 600

“No need to introduce, climate change is happening and we can't stop it” Interviewee 242

“Money will go to supermarkets, affect older people bags should be recycled, charge won't change anything” Interviewee 258

47. Certain groups of professionals raised specific issues; police officers raised concerns about how the charge could be enforced. One particular issue that they raised was the possible difficulties that no carrier bag may pose in relation to proving incidences of shop lifting. Shop assistants raised concerns relating to charging bags for large items and expensive goods.

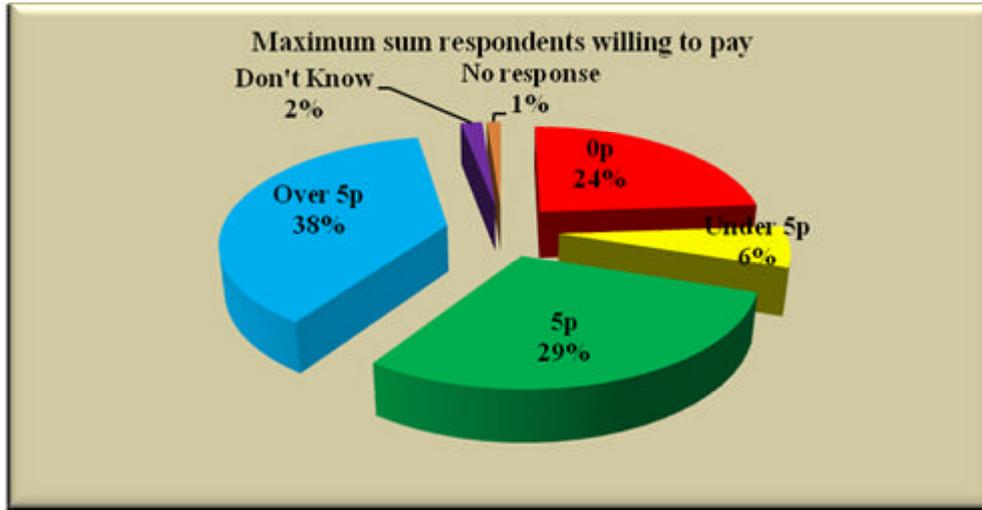
48. In the June 2010 single use carrier bag consultation document the WG had recommended a 7 pence minimum charge, which they stated would cover the cost to society of producing, consuming and disposing of each bag (WG, Consultation, 2010, 1). However, in the final Regulations the minimum charge was set at 5 pence. As stated previously, this sum is considerably less than the levy applied in the Republic of Ireland (currently the sterling equivalent of 19 pence).

49. The WG refer to the success achieved in Ireland in reducing the number of bags administered by shops. However, when the charge was introduced in Ireland it was the equivalent of 9 pence (based on exchange rates in 2002).

50. With the reduction of the charge in Wales from 7 to 5 pence, the BRASS researchers were keen to enquire what the public in Cardiff would be willing to pay.

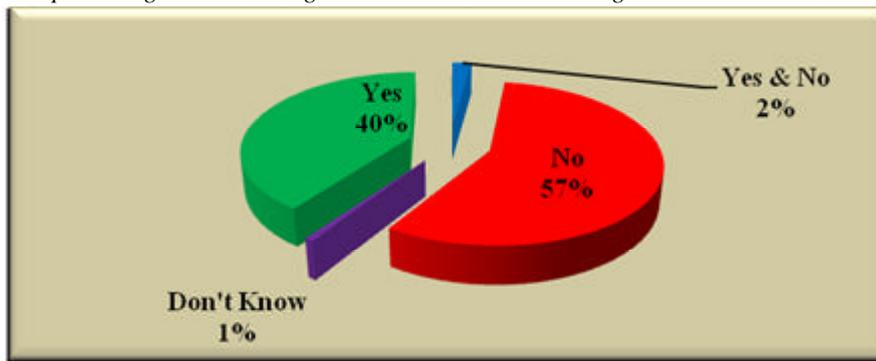
51. Thirty-nine percent of respondents were willing to pay over the minimum sum of 5 pence. This amount varied from 10 pence to on some occasions up to £2.00. However, it must be noted that those who were willing to pay over 50 pence did stipulate that it would depend on the quality of the carrier bag. Graph 9 illustrates that 29% of the sample were willing to pay the minimum sum of 5 pence set by WG, 6% said they would prefer to pay less than the minimum sum. 24% said they would pay nothing. This figure however is missing leading and must be assessed in relation to whether the respondent agreed with the charge and if they did why they stated that they would pay 0 pence.

Graph 9: Percentage of respondents and the maximum price they would pay



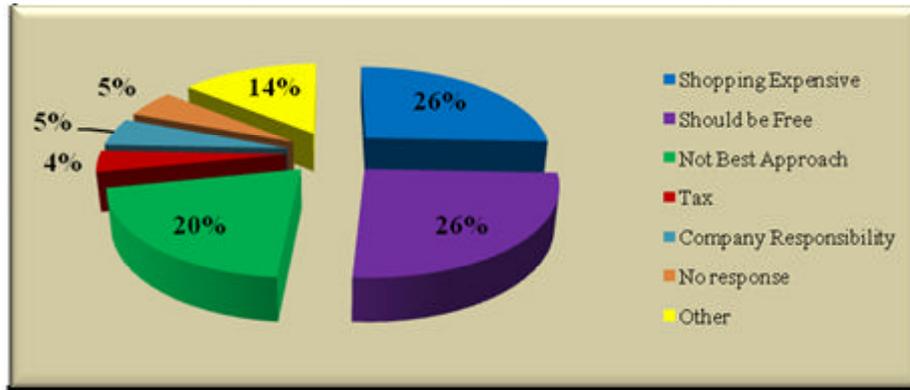
52. Of the 24% who said they would pay nothing for a carrier bag, 57% disagreed with the charge and 40% agreed, whilst 1% did not know and 2% had mixed feelings about it (Graph 10).

Graph 10: Agreement/Disagreement with Scheme amongst those who would not pay for a carrier bag



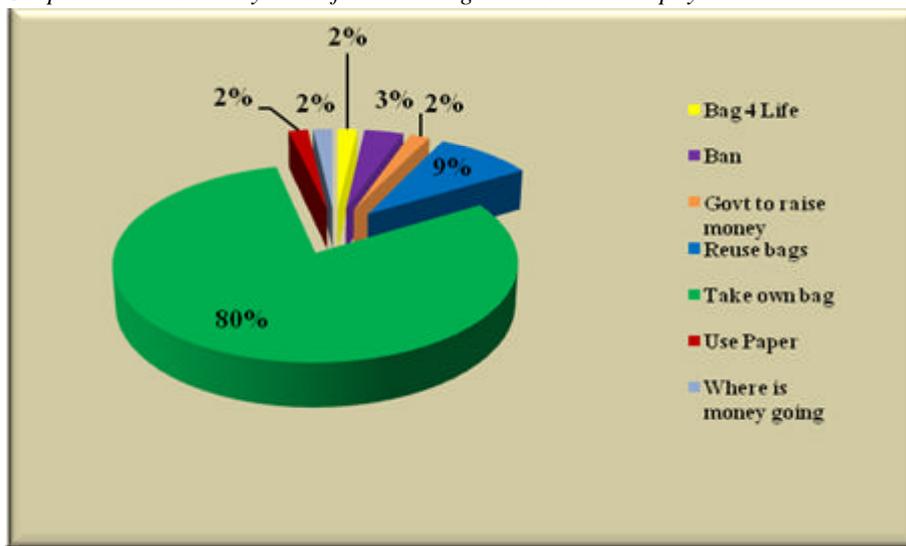
53. The reasons that the respondents provided were grouped into the following categories: shopping expensive; bags should be free; not the best approach; tax; companies' responsibility; no response and other, which includes issues as to the destination of the money and the impact the charge may have on impulse spending. The results are illustrated in Graph 11. The reasons identified for under the categories 'shopping expensive' and 'should be free' are the same as those identified under paragraph 45 above. 26% of respondents who did not want to pay and disagreed with the charge identified the problem with the present cost of shopping and that a carrier bag was a normal part of customer service. 20% of respondents stated that the charge was not the best approach to dealing with the problem. Under this category the reasons given were that paper bags should be used in place of plastic, bags should be incinerated or that this was a pointless exercise with limited impact.

Graph 11: Reasons why those against the charge did not want to pay



54. More interesting was why those who agreed with the carrier bag charge but had stated that the maximum they would pay was 0 pence. One of the reasons why this group took the stance that they did was because they were already taking their own bag when they went shopping (80%). Another 9% said it was because they already reused bags or 2% stated that they used Bags for Life. A small percentage of this group were concerned about the final destination of the revenue from the charge, whilst another small percent felt that a ban was a more effective means of achieving the goals set out by the WG.

Graph 12: Reasons why those for the charge did not want to pay



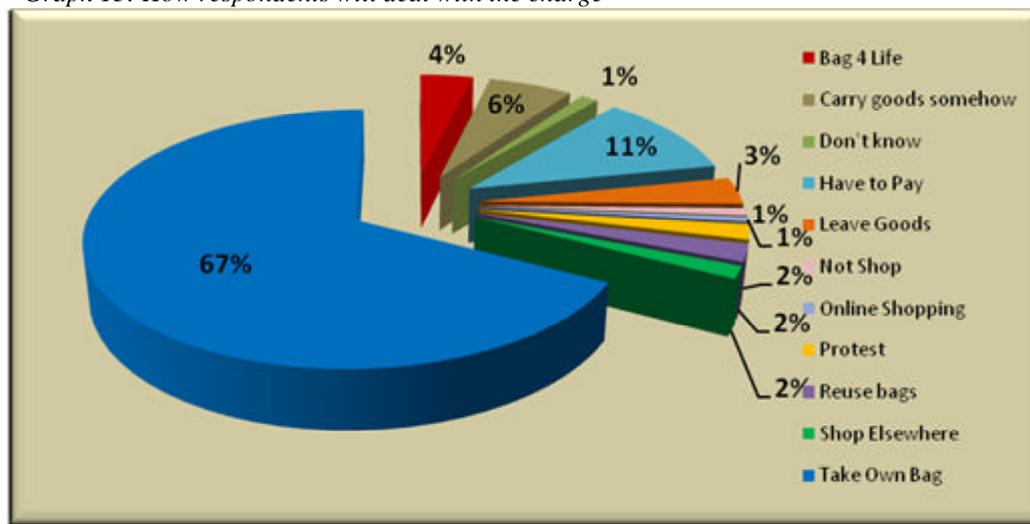
55. An important issue to consider here is that the majority of the entire sample did believe that the charge only applied to plastic bags, which may explain why such a high figure were not willing to pay as they already carried a Bag for Life or took their own bag. This is also connected to the belief that the charge applies only to supermarkets or food retailers.

56. Only eight people out of the 600 identified that the funds were to help charities and of these eight people, 3 raised concerns about the funds being sent to random charities.

4.4 Will it change their behaviour

57. Respondents were then asked how the charge would impact how they would shop in the future. Of the 53% of respondents who answered this question, 67% stated that they would take their own bag with them when they went shopping. 11% said that they would just have to pay the charge, whilst 6% said they would carry the goods somehow but gave no further details. A small percentage of those who answered the questions did say that they would leave the goods, shop elsewhere, shop online or not shop. As the charge is mandatory, extends to all shops and equally applies to online shopping, it is difficult to envisage how this group will respond when confronted with the charge (see Graph 13).

Graph 13: How respondents will deal with the charge



4.5 Why Welsh Government had introduced the charge

58. The final question posed to the respondents was why they believed that the Welsh Government had introduced the charge. This was the most surprising response as even those respondents who agreed with the charge held some negative views on why WG had passed the regulations making the charge mandatory (Graph 14).

59. The overwhelming response was that the respondents believed that WG had introduced the charge for environmental reasons (57%). However 13% believed that the reason the charge had been introduced was to raise money for the Welsh Government. It was viewed as a tax or as a means of dealing with the economic climate by bringing in additional revenue. Few respondents knew that the

"Small steps should be taking larger" Interviewee 78

"Wales first to sign up to Sustainable Development" Interviewee 102

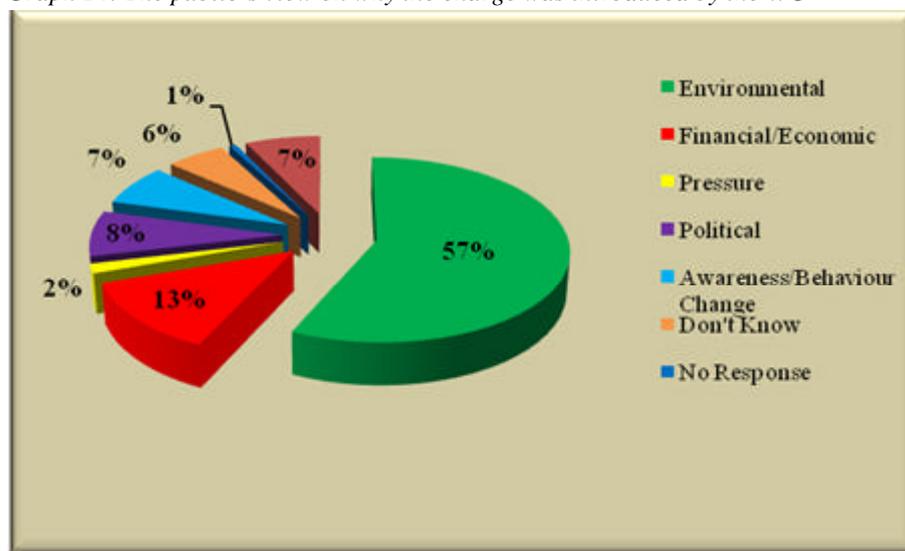
"Progressive environmental thinking" Interviewee 134

"Makes them look like they are doing something for environment" Interviewee 408

"Politics - responsibility with shopper not business which is unfair" Interviewee 426

funds would not be returned to WG. Although, respondents did feel that they would be more willing to pay the charge if they were assured that the funds would be distributed to charities.

Graph 14: The public's view on why the charge was introduced by the WG



60. A further 8% believed that the reasons were political and viewed the charge as a means for the government to 'flex' its devolved powers and were leading the way only because England had not. Whilst a small percentage (2%) felt that it was either due to pressure from Europe or from environmental lobbying groups.
61. 7% of respondents did identify that the WG were trying to change our behaviour by either incentivising or encouraging the public to act differently.

5. Conclusion

62. Throughout the survey, respondents repeatedly commented on the negative impacts of plastic and plastic bags and reducing the consumption of plastic bags was in general considered a positive step.
63. However a report produced by the Environment Agency (EA, 2011), which assessed the environmental impact of carrier bags found that:
- Whatever kind of carrier bag is utilised, the key to reducing the impact of any carrier bag is to take it back and refill the same bag as many times as practicable whether for shopping, lining the kitchen bin or other purposes in the home, garden or office.
 - The plastic 'bag for life' favoured by many (low-density polyethylene) only needs to be used 4 times to be certain that it has got a lower carbon emissions footprint than single-use, lightweight (high-density polyethylene) carrier bags.
 - Lightweight single-use carrier bags have the lowest carbon footprint per bag when consider primarily for their resource use and production. Paper, heavyweight plastic and cotton bags all use more resources and energy in their production.

- Lightweight single-use carrier bags are not particularly negative, especially if they are re-used once or twice. It all depends on the number of times a bag is reused.
64. However and importantly, the EA study did not take into consideration if the litter impact of plastic bags and the effect they have on wildlife. The report is just one contribution to a growing debate on the pros and cons of plastic bags.]
 65. While respondents did raise concerns about litter, in particular the benefits that the charge may have on achieving a cleaner environment and on the negative impacts plastic bags have on birds and marine species, none of the respondents identified that it was our means of using and disposing the carrier bags that led to the creation of the litter.
 66. The public in general do believe that paper bags are more sustainable and environmentally friendly alternatives and few were aware that it would apply to this type of bag. In fact, introducing and using paper bags was often raised as an alternative to the charge. To date, the environmental impact of paper bags has not been communicated to the general public and the percentage in agreement with the charge may alter their opinion when faced with the reality that it extends beyond the standard plastic carrier bag.
 67. Another belief is that the charge will apply mainly to food retailers and in particular to supermarkets. There did seem to be some confusion amongst the respondents as to the extent of the term 'All', which for many only meant all of the shops like supermarkets or large retail stores. For many, the reality that the charge would apply to their local shop had not been fully understood.
 68. The public, whilst in agreement with the charge, do have reservations about the reasons why the Welsh Government introduced the charge and although aware of many of the environmental reasons, many of the respondents did hold very strong views that the charge was being introduced solely to raise revenue for the government.
 69. Overall, the majority of respondents did know that a charge was to be introduced, even if they did not know the full implications or the extent of the charge. The majority of the respondents were also aware of the environmental issues related to carrier bags (if mainly related to plastic carrier bags), however what was not identified in the responses was the realisation that carrier bags are not the cause of the problem but that they were merely a by-product of over consumption. The only reference to this was when some respondents stated that the charge may impact negatively on impulse buying.
 70. Our current rate of consumption (and the resources required to meet that rate) in Wales equates to three planets worth of resources (WAG, 2009). Consequently, one of the major environmental challenges that confront Wales as a country is reduce the impact that our consumption behaviour has on our limit resources. Carrier bags are merely the means that we transport the result of our consumption.

ANNEX I: SHOPS REQUIRED TO CHARGE FOR BAGS:

- a) High street stores;
- b) Local shops;
- c) Take-away restaurants;
- d) Other restaurants which sell goods in addition to offering restaurant services (such as those which sell alcohol or food to consume off the premises);
- e) Hotels which sell goods in addition to offering hospitality services (such as where goods are sold in hotel gift shops for example);
- f) Market traders;
- g) Charity shops;
- h) Cinema undertakings which sell goods in addition to showing films;
- i) Cobblers which sell goods in addition to offering shoe repair services (such as those selling shoe polish, security products or gifts);
- j) Hairdressers which sell goods in addition to offering hairdressing services (shampoos and other hairstyling products for example);
- k) Opticians selling glasses and other ocular-related products;
- l) Individuals who sell goods at car boot sales as part of a trade or business (but not individuals who sell their own possessions occasionally);
- m) Direct selling companies and agents;
- n) Dental practices or associates which sell goods in addition to offering dental services (such as those selling dental hygiene products);
- o) Vet practitioners which sell goods in addition to offering veterinary services (such as those selling pet food or home hygiene products for example);
- p) Unincorporated associations of individuals which sell goods as part of a trade or business; such as members' golf clubs which sell goods to non-members;
- q) Wholesalers;
- r) Public authorities or subsidiaries of public authorities which sell goods (such as leisure centres, schools or colleges);
- s) Public bodies or subsidiaries of public bodies (such as Cadw gift shops)
- t) University and student union shops;
- u) Religious shops at or adjoining places of worship (such as Christian book shops on church premises); and
- v) Museum shops.

ANNEX II: EXEMPT BAGS

Bags, which are for:

- a) Food items that are unwrapped – loose fruit and vegetables, bread, pick and mix sweets etc. This includes food items that are partly unwrapped – food placed in a sleeve or other part open wrapper. This includes small bags found on a roll in the fruit and vegetable aisle.
- b) Loose seeds, bulbs, corms or rhizomes – loose grass seed, flower bulbs, seed potatoes etc.
- c) Unpackaged blades - axe, knife blade or razor blade.
- d) Unpackaged plants or flowers that could have been contaminated by soil.
- e) Packaged uncooked:
 - i. fish or fish products – a pouch of raw fish fillets or raw minced fish meat.
 - ii. meat or meat products – pre-packed raw steak or packet of raw beef burgers or sausages etc.
 - iii. poultry or poultry products – a pack of raw chicken fillets or raw turkey mince etc.
- f) Live aquatic creatures in water – fish, coral, crabs etc.
- g) Bags that are sealed before the point of sale – this would be for items placed in bags and sealed before they are offered to the customer. These are not subject to the charge as the customer has no choice but to accept the bag as part of the packaging.
- h) On board ships, trains, aircraft, coaches or buses.
- i) In airports after you pass through security.
- j) Bags used for mail order.
- k) Small flat paper bags that do not have handles and are no more than 175mm (width) x 260mm (height) or about the size of a greetings card.
- l) Very small plastic bags that do not have handles and are no more than 125mm (width) x 125mm (height). These could be used for very small items such as buttons or small screws.
- m) Small three dimensional paper bags that do not have a handle and are no more than 80mm (width) x 50mm (gusset width) x 155mm (height). These are about the size of bottle of cough mixture.
- n) Gusseted box liners – these are sometimes used to line reusable boxes or cover reusable boxes that are used for deliveries.

Annex III: Shopper Questionnaire

SHOPPER QUESTIONNAIRE

SITE	
SURVEYOR	
DATE	
GENDER	M/F
AGE RANGE (circle one)	21 and under; 22-34; 35-44; 45-54; 55-64; 65 and over; decline
PROFESSION	
IF CARRYING BAG—IN WHICH SHOP WAS THE PERSON SHOPPING	
QUESTION	RESPONSE
1. Do you know that a compulsory charge on carrier bags will be introduced in Wales?	YES NO (If NO go to Q.5)
2. If YES – How/where did you hear about the charge?	
3. If YES – When will the charge be introduced?	
4. If YES—What will be the minimum charge?	

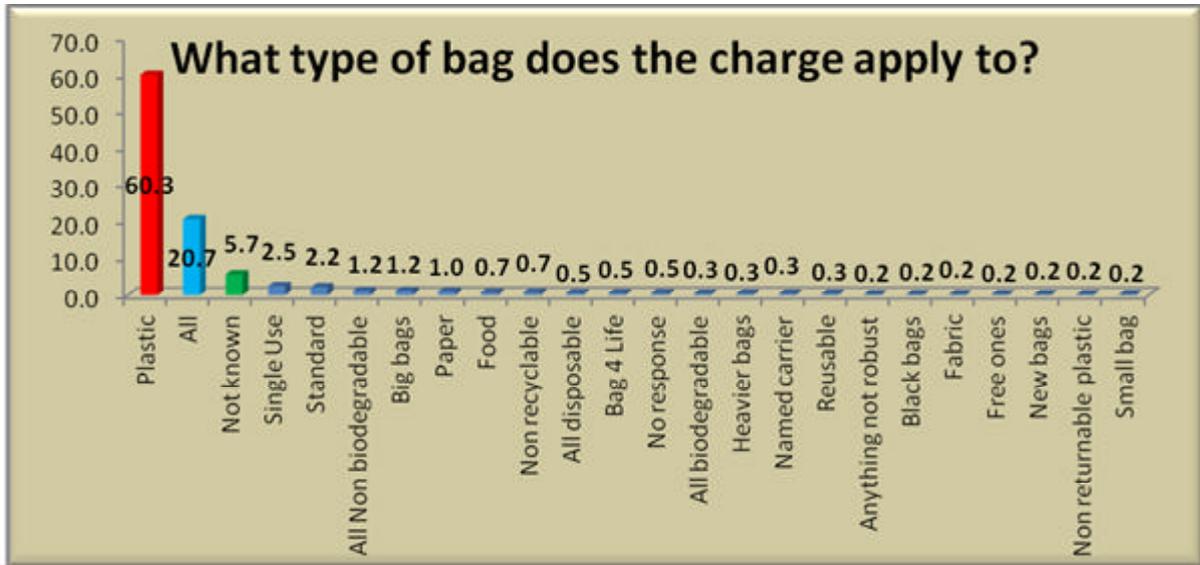
PLEASE TURN OVER

QUESTION	RESPONSE
5. What types of shops do you think will be required to charge for carrier bags?	
6. What kind of bags do you think this charge will apply?	
7. Do you agree with a charge on carrier bags?	<p>YES</p> <p>NO</p>
7a. Why do you agree or disagree with the charge?	
8. What is the maximum that you are willing to pay for a carrier bag?	
8a. If you are not willing to pay the charge – WHAT WILL YOU DO?	
9. Why do you think the Welsh Assembly Government has introduced this charge?	

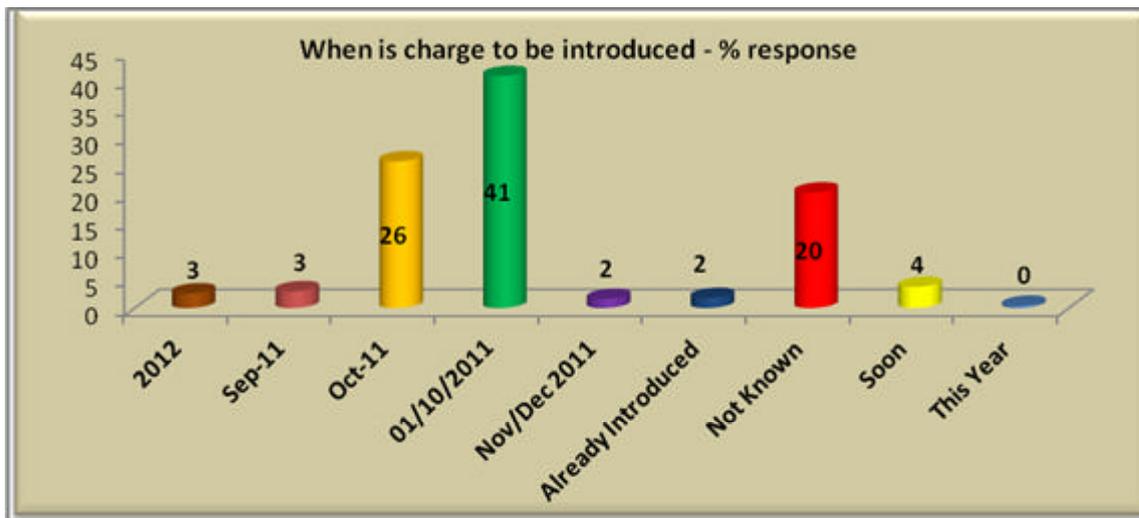
Annex IV: Graphs

Section 4.1: Level of Awareness

Graph5: Percentage of bag type identified by respondents to which they believe the charge applies

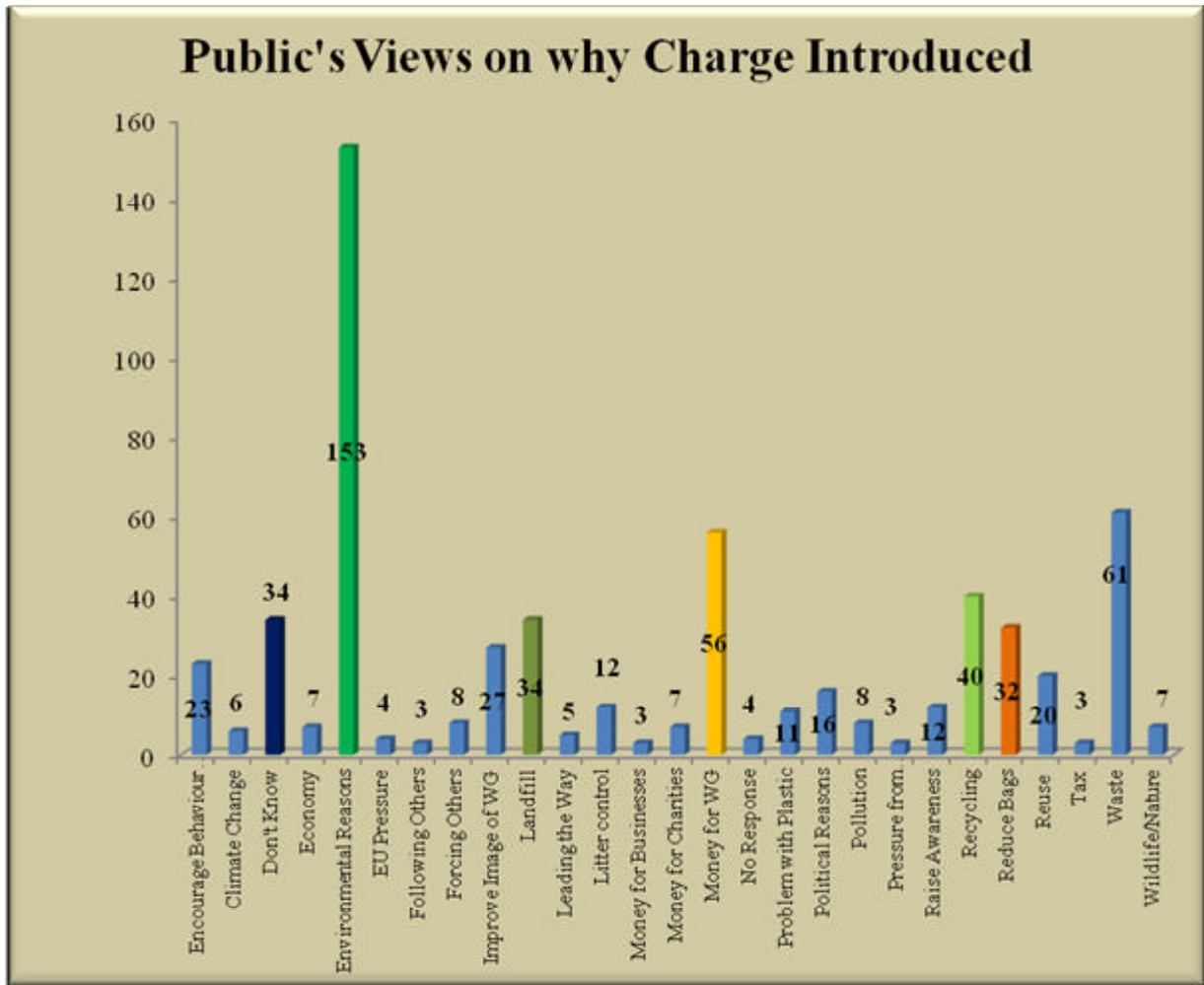


Graph 7: Date on which percentage of respondents, identified charge would begin



Section 4.5 Why the Welsh Government had introduced the charge

Graph 15: Public's Views on why Charge Introduced



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