

# Barriers to recycling at home



A report on the findings from an in-depth structured investigation of the barriers people encounter in recycling at home, and targeted ways these might be overcome.

WRAP helps individuals, businesses and local authorities to reduce waste and recycle more, making better use of resources and helping to tackle climate change.

**Written by:** Robert Pocock, Ian Stone, Helen Clive, Rebecca Smith, Jill Jesson of M.E.L. Research and Stefan Wilczak of Get it Sorted.

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**Front cover photography:** Kerbside collection 2007

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# Executive summary

M-E-L Research was commissioned by WRAP (Waste & Resources Action Programme) in the autumn of 2007 to explore people's barriers to recycling at home. The objective of the research was to generate a more rigorous, detailed and in-depth understanding of what prevents householders recycling as much as they could. The intention of the research was to assist Recycle Now in developing more effective ways of getting householders to recycle more things more often.

The work involved three stages:

- developing an enhanced conceptual framework for investigating the various barriers to recycling, drawing on the evidence of recent published literature;
- undertaking qualitative depth interviews with 72 householders to explore barriers in detail; and
- carrying out a quantitative household survey with 1,512 householders drawn from a sample of nine local authorities in England, regionally representative and covering a cross section of three recycling collection regimes – weekly residual and weekly recycling; weekly residual and fortnightly recycling; and alternate weekly collection of recyclables and residual waste.

The research has led to some important fresh thinking about the population segments that might be targeted for recycling promotional and communications campaigns especially at more local level. It has also clarified that four very different types of barrier exist:

- situational barriers including not having adequate containers, a lack of space for storage, unreliable collections, unable to get to bring sites;
- behaviour for example household disorganisation, being too busy with other preoccupations, difficulties in establishing routines for sorting waste and remembering to put it out;
- lack of knowledge such as knowing what materials to put in which container, and understanding the basics of how the scheme works; and
- attitudes and perceptions such as not accepting there is an environmental or other benefit, resistant to householder sorting and not getting a personal motivational reward from recycling.

Very different messages and operational actions are needed to respond to these barriers. Local authorities need to understand the prevalent barriers amongst the sub-groups in their population and develop communications strategies that are appropriate to addressing these barriers. Some interventions will be operational (service improvement) others about information and practical advice about how to use the scheme, and others motivational; showing why participation is worthwhile. In order to select the most appropriate intervention for a given audience, a clear analysis of the prevalent barriers is required.

The research has generated an important new approach to thinking about population segments, in relation to the most effective messages to communicate to these segments. The qualitative research has shown that efforts to improve people's recycling performance have much in common with efforts to improve competence in undertaking desired behaviour generally. As people learn 'the system' they move from 'unconsciously incompetent' (not aware, don't care) to eventually reaching 'unconscious competence' (embedded systematic routines that can be carried out without conscious effort).

Interpreting recycling behaviour with reference to this model (deriving from Dreyfus & Dreyfus, 1986) helps to explain the different barriers people encounter, which are dependent on their existing level of competence. The competences model shows that the amount of conscious effort required to recycle actually declines as people become 'unconsciously competent'.

Further analysis of the quantitative survey has also generated a deeper insight into the 'committed recycler' section of the population. Recycle Now has been strongly geared toward increasing the committed recycler fraction of the population and this remains a core business performance indicator for WRAP in the Business Plan to 2011. The research has revealed that whilst people qualifying as committed recyclers do recycle more than those that are not committed, they still encounter barriers to recycling as much as they possibly *could* recycle. In fact there are specific barriers that only become apparent to people once they have attained the attitude and behaviour status of a committed recycler. If the behavioural outcome of recycling communication initiatives is to help people 'recycle more things more often' it is clear from this research that a significant benefit can result from targeting further improvements within the committed recycler sector.

To highlight this, we have run an enhanced analysis of the data, detailed in this report, by creating a defined subset within the committed recycler category – to create a ‘super-committed recycler’ group. These are people who give the top category response only to the three committed recycler questions (committed recyclers are defined as people who say recycling is very or quite important to them; recycle a lot or everything that can be recycled; and recycle even if it requires additional effort) i.e. excluding anyone reporting that recycling is only quite important to them or they recycle a lot but not everything. The research results, which have not been re-weighted to the national profile of all adults, show that four categories of recycler can be quantified as follows:

- non-recyclers (admit to not recycling at all) - 6%;
- non-committed recyclers - 23%;
- general committed recyclers - 41%; and
- super-committed recyclers – 30%.

Thus the committed recycler group in this survey (71%, un-weighted data) can be seen to consist of two sub-groups, 30% super-committed and 41% general committed. Analysis of the barriers people experienced, as shown in detail in this report, demonstrated that some 30-40% of general committed recyclers faced barriers that, if overcome, could allow them to recycle more things more often. Even amongst the super-committed group, some 10-25% experienced barriers that, if overcome, could enable them to recycle more things more often. Thus those defined as super-committed by the metric questions may only be ‘broadly competent’ when considering the newly defined behavioural competence levels of this research. Specifically the results of this research show, for example:

#### **Situational barriers:**

Current recyclers say they would recycle a little or a lot more if they had (proportion of those surveyed giving each response is shown in parentheses):

- collections of a wider range of materials (52%);
- bigger recycling containers (23%);
- more recycling containers (20%);
- more space to store their recycling container (19%);
- more frequent recycling collections (18%); and
- containers that are easier to move (16%).

#### **Behaviour barriers:**

Current recyclers sometimes or often:

- bin things because they are not sure if they can be recycled (48%);
- throw recyclable bathroom wastes in the residual bin (41%);
- put things in the recycling even if they’re not sure they can be recycled (36%);
- forget to put out the recycling because they are not sure of the collection day (33%);
- bin things because their recycling container is full (21%); and
- bin things rather than cleaning them for recycling (19%).

For most recyclers (95%) recycling has become part of the ‘everyday household routine’. However, over half (53% found it harder recycling at Christmas, 16% in the winter generally, and 8% during holidays or in the summer generally, They are also put off a little or a lot by:

- fear of identity theft (16%);
- having to store recyclables (12%); and
- having to clean recyclables (7%).

#### **Knowledge and understanding:**

Less than half the sample as a whole (48%) understood ‘very well’ what they are supposed to use their recycling containers for. About a third of recyclers said it would increase their recycling if they had better information about their recycling services. Some recyclers also said that council information had not helped them:

- understand their local recycling scheme as a whole (21%);
- understand the real benefits of recycling (12%);
- knowing what can and can’t be recycled (12%); and
- knowing when the collection service operates (5%).

## Attitudes and motivators:

The vast majority of recyclers (90%), say they are 'happy to be doing their bit for the environment' and 69% say they feel 'good about themselves' when recycling. However 29% feel they are just 'doing it because the council is telling us' and 17% 'do it because everyone else is doing it'.

Recyclers would still be encouraged to recycle more by:

- seeing the practical impact of recycling in their local area (86%);
- feeling more appreciated by the council (52%);
- receiving an incentive for recycling (56%); and
- being fined for not recycling (34%).

Overall if asked which one of three reasons best sums up why they recycle, 59% said 'because they believe in it', 27% say 'it's part of the everyday household routine, and 14% 'because the council asks them to do it'.

For declared non-recyclers (only 6% of the sample) their main reasons for not recycling at all, were that it is easier to throw everything in the bin (46%), they had not seen any information about recycling (44%), they did not know what can and can't be recycled (32%), and they have nowhere to store recyclables (also 32%).

From this evidence, and drawing on the competences model, we have proposed that initiatives to overcome barriers to recycling should be approached with consideration of 'seven levels of recycling competence'. This simple model sets out a whole spectrum of competence, ranging from Level 1 (unconscious incompetent, where recycling is simply 'not on people's radar') through intermediate levels where people are struggling to do what is required, to the highest Level 7; a state of ideal competence summed up as the perfect or 'complete' recycler. Those that fall into the super-committed bracket by metric definition may still be classified as "broadly competent" rather than "the complete recycler" if they are reliable and regular recyclers but miss out some materials on occasions, for example. Efforts to move people up from level to level, towards ever higher competence, involve helping overcome the barriers that lie between the different levels. These barriers may be situational, behavioural, knowledge or attitudinal, at any level, as this research report sets out.

Different messages and methods of communication are needed for different levels of competence and this research has concluded by setting out six types of communications messages focused around the relevant levels of recycling competence, explained in detail in the report. The six types of communications message are:

- instructions – Basic how-to 'user guide' information (Message a);
- explanations - What is recycling? (Message b);
- dispelling the myths - education and information (Message c);
- how it works - What actually happens to the recyclables (Message d);
- rewards - Feedback and thanks (Message e); and
- saving cash – Cost effectiveness of recycling (Message f).

## Summary

- This research has shown the need for customisation and targeting of recycling promotional messages so that they link better to the different barriers faced by different segments of the population.
- Barriers can be usefully divided into the following four categories: situations, behaviours, knowledge and attitudes. Promotional communications initiatives can address the latter three barriers but should not be applied in isolation from steps to make the practical (situational) environment conducive to recycling.
- People's journey along the road to becoming the ideal or 'complete' recycler involves them in a 'learning and competence' process.
- Helping people along this journey involves targeting messages that assist people in making that step up to the next level of competence.
- WRAP's committed recycler metric is particularly useful in highlighting the barriers faced by non-recyclers and recyclers not yet reaching the 'committed recycler' status.
- However, it has also highlighted the barriers that nevertheless remain within the committed recycler group; committed recyclers can still progress and recycle more things more often.

- We have proposed sub-dividing committed recyclers into standard committed and super-committed, so that the different forms of barrier relating to these two sub-groups can be more effectively targeted.
- It is evident that even amongst super-committed recycler population there is still around a fifth who believes they could recycle more things more often; super-committed recyclers are not necessarily complete recyclers.
- We have outlined the types of people commonly found at the different levels of competence, and the types of messages and communication media most suited to supporting people in making that next step up.

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## 1.0 Introduction, aims and objectives

M·E·L Research was commissioned by WRAP in the autumn of 2007 to explore people's barriers to recycling at home. The objective of the research was to generate a more rigorous, detailed and in-depth understanding of what prevents householders recycling as much as they could, when good kerbside recycling facilities are provided. The intention of the research was to assist WRAP's consumer campaign Recycle Now in developing more effective ways of helping householders to recycle more things more often.

The work involved three stages of research:

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Chapters 2 and 3 of this technical report provide some context for this work by setting out a summary of current knowledge on barriers to recycling provided by contemporary literature, and a conceptual framework for organising our thinking and analysis of different types of barriers. Chapter 4 explains the method used for the fieldwork, the sample frame for selecting the nine authority areas where this work was carried out, and the survey design for both semi-structured qualitative research and a quantitative survey of 1,512 residents.

Chapter 5 presents the results of the qualitative, investigative research, and Chapter 6 the quantitative statistics from the questionnaire survey.

In Chapter 7 we have drawn the findings together and presented a proposed framework for targeting communications messages on the key barrier segments, and the conclusions from work as a whole are summarised in Chapter 8.

## 2.0 Background and context – what we know about barriers to recycling

Originally it was anticipated that this project should include a review of the relevant contemporary literature on barriers to recycling. In the event, the review was carried out in-house by WRAP and it highlighted a need to update our understanding of barriers to recycling, taking into account the changes in collection services that have occurred since much published research in this area has been undertaken. To provide context to this report, we have included a short summary here from a review of relevant literature conducted separately by M·E·L Research. The aim of this section is to highlight the limitations to current knowledge and understanding of the barriers people face when recycling at home. WRAP's latest research reported here, has been designed to help fill this gap.

### 2.1 Introduction

Recycling behaviour has been explored through empirical survey research for more than twenty years. Historically, the published literature on recycling behaviour and ways of influencing it, has been based on the presumption that participation is largely voluntary and driven by the positive motivation of the active recyclers rather than any obligation and the implicit universal duty to comply. Much of this earlier literature has already been expertly summarised by Tucker (2003).

During this time there has been a vast step up in provision of recycling facilities to households (both in terms of quality and quantity), and the requirements households are expected to meet in participating in recycling have become more extensive and in many cases (particularly for source-segregated recycling schemes) more complex and demanding. As a result, waste managers face an increasingly challenging task in getting householders to participate fully and effectively in these schemes. Earlier research does not therefore adequately investigate these circumstances.

By 2007 most UK residents are not invited to opt in or out of domestic waste segregation, they are expected to comply. Most households are provided with free boxes, bins or cartons by their refuse collection authority for separating different types of household waste. Instead of placing all household waste into one black sack or bin residents are now required to sort their waste into a variety of receptacles – which marks a substantial change in the required behaviour. This has been driven largely by the national waste strategy and legislation which requires local authorities to increase the levels of recycling and diversion of household waste (particularly organic waste) from landfill. Increasingly, participation in recycling is being requested of all.

As a consequence, it is increasingly necessary for waste managers to ensure as many people as possible recycle as much of their waste as possible. To achieve this, it is now necessary to understand more fully than ever before, what 'barriers' prevent the population at large from recycling as much as it could, and how these barriers might be overcome.

Because barriers to recycling have only recently emerged as such a crucial element of knowledge, the historic literature has contributed little to our current understanding. More recent studies have helped shed some light on the subject, as outlined below, but the specific types of barriers people face (as opposed to motivators and behaviour), remain poorly understood.

### 2.2 Theory and modelling – explaining recycling behaviour

The first step in this research has therefore been to try and classify barriers into different types, based on an understanding of recycling behaviour and what influences it. Many studies of social environmental behaviour generally are based on the social psychology Theory of Planned Behaviour, and test how far there are valid links between four core variables: attitude, motivation, knowledge and behaviour. The basic premise is that behaviour is a product of knowledge and understanding, coupled with attitude and behaviour. These core influences are neatly summarised in a conceptual model of environmental behaviour by Barr (2007) which we discuss in detail in the following Section 3.

Testing 'knowledge' is also common in recycling behaviour research; exploring public understanding of what materials can be recycled, how and where they can be recycled, and understanding the reasons why we should recycle. Evaluation studies of the influence of education and publicity materials on recycling are scarce. Generally evaluation studies are based on 'step up' campaigns (where the evaluation happens around a step-change in the nature or quality of the recycling service) and it is therefore impossible to differentiate between the influence of

information or instructional materials and the impact of the introduction of the new service itself. From this it can be seen that while there has been progress in developing a way of organising our knowledge about the barriers to recycling, very little practical research has been carried out to measure the prevalence of different types of barriers or to understand them in depth.

### 2.3 The evidence since 2003

The most recent studies are often snapshots of a specific place at a given point in time, often documenting the impact of or response to experimental service provision by different local authorities. They concentrate on comparing design and performance variations with a technical and policy focus for the waste management programme. As such these accounts give some insights into barriers specific to a given locality and type of service, for example green waste, or accepting a free compost bin or kerbside container.

The barriers to recycling that tend to be reported in these studies show the importance of understanding household behaviour in a given situation or context. These latest studies continue to explore the Theory of Planned Behaviour as a predictor, but not as a behaviour change theory, and are based on quantitative designs; no in-depth work has been undertaken with residents to understand what goes on inside a home before the waste gets to the kerbside and the practical barriers that arise from the way the domestic household is organised. Moreover, they do not take us any further in our understanding of the many different types of problem that create barriers to recycling at home, and how to tackle them. The one exception to the dominant environmental paradigm in recycling research, examines recycling as part of general domestic labour – one of the everyday activities or ‘chores’ that get done in and around the home (Oates & McDonald, 2006). This has proved useful in developing the research reported here, as we have subsequently identified the absence of domestic routine and ‘order’ as a behavioural barrier for some households, and the potential value of communications messages helping people get organised and ‘embed’ recycling into the ‘unconscious’ competent conduct of household chores.

### 2.4 A fresh perspective on recycling behaviour

The overview of existing literature undertaken prior to this research suggests we need to take a fresh look at the subject, with less emphasis placed on attitudes and environmental motivation and more on structural factors (physical problems sorting and storing the materials in the domestic setting) and understanding waste segregation behaviour (who does it and when).

An important new approach to understanding and influencing environmentally-related social behaviour is to be found in Defra’s latest strategy on environmental change, which adopts a social marketing approach to environmental behaviour change. Social marketing is an approach to promoting socially desirable behaviour by starting first with an understanding of the individual – their circumstances, knowledge, attitudes and behavioural intentions - rather than by designing service changes from the service provider’s angle and in isolation from the service user. It is based on an analysis of the ‘values – action gap’ (what prevents people’s actions reflecting their values), and considers internal and external barriers and motives in a context of values, willingness, action, and ability to make the action happen. Together with the 4 E’s framework (enable, encourage, engage, exemplify), the marketing model for environmental behaviour change presents a new approach - a toolbox - from which to tackle barriers to recycling.

Later in Chapter 7 it will be seen that we have developed an approach to understanding and overcoming people’s barriers to recycling that maps closely across to the broader Defra Framework for Pro-environmental Behaviours (Defra, 2008).

### 2.5 Key Summary Points

- Reasons for recycling and not recycling have been explored for over twenty years, but most of this research has little bearing on the complex requirements many householders now face in becoming effective recyclers.
- Social Psychology and the Theory of Planned Behaviour has been the dominant approach to explaining and modelling household recycling behaviour.

- Current research evidence on barriers to recycling dwells predominantly on knowledge and household behaviour but lacks a comprehensive conceptual framework within which to understand and tackle the barriers to recycling more effectively.
- Social marketing theory offers a new way of approaching recycling behavioural change.

## 3.0 Basic Conceptual Framework for Analysing Barriers to Recycling

### 3.1 Introduction

In the light of the overview of previous research in the section above, it is evident that a better structured approach is needed in order to develop a deeper insight into the barriers people face when recycling at home. We have therefore developed a conceptual framework for the Barriers to Recycling at Home Research founded on the basic structure developed by Barr (2007) for understanding and influencing barriers to environmental behaviours generally.

There are four barrier categories:

- situational barriers including not having adequate containers, a lack of space for storage, unreliable collections, unable to get to bring sites;
- behaviour for example household disorganisation, being too busy with other preoccupations, difficulties in establishing routines for sorting waste and remembering to put it out;
- lack of knowledge such as knowing what materials to put in which container, and understanding the basics of how the scheme works; and
- attitudes and perceptions such as not accepting there is an environmental or other benefit, resistant to householder sorting and not getting a personal motivational reward from recycling.

Based on M-E-L Research's previous research experience and the review of wider literature, we have expanded on this general framework and defined potentially 27 specific barrier types (the reasons people give for not recycling as much as they could), grouped under these four principal barrier categories. These were used to guide the lines of enquiry within the consumer survey, and are summarised and labelled as follows:

#### *3.1.1 Situational Barriers*

- S1 Household believes it is not provided with service, container or ways to get one.
- S2 Household has no container (missing, lost).
- S3 Limited, sporadic or missed collection services.
- S4 Limited range of materials collected.
- S5 Physical problems in storing container (lack of space, unsuitable for property).
- S6 Physical problems moving container (too heavy, cumbersome).
- S7 Unsuitable container for the purpose (too small, ugly, hazardous).
- S8 Counteractive appeal of the one-route residual bin.
- S9 Transport problems in accessing bring sites.

#### *3.1.2 Behaviour and Organisational Barriers*

- B1 Basically not on our lifestyle radar.
- B2 Too busy, all too much fuss and bother.
- B3 Household not organised enough to be able to separate waste.
- B4 Not in the habit or lack regular domestic routine.
- B5 Part of the throw-away behaviour society, not brought up to think recycling.
- B6 Object to hygiene, safety and cleanliness requirements.

### 3.1.3 Knowledge and Awareness Barriers

- K1 Find the whole scheme too confusing, don't understand the system as a whole.
- K2 Lack of understanding of, or confused about, what items go in which container.
- K3 Lack of knowledge of what item is recyclable or residual, for each material collected.
- K4 Poor awareness of, or confused about, which day or week to put out what.

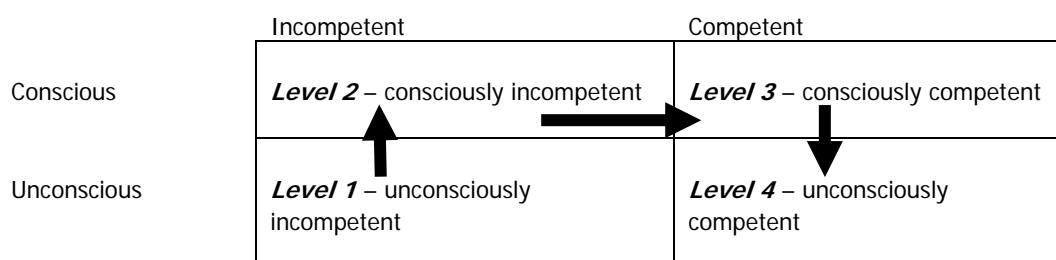
### 3.1.4 Attitudinal and Motivational Barriers

- A1 Believe it's the council's problem, not doing their work for them.
- A2 Believe it's a retailer/industry problem, not doing their work for them.
- A3 Object to being told by the council what to do, or to supporting the council.
- A4 Object to attitudes of collection crew or enforcement officers.
- A5 Not convinced, or aware, of physically what is done to re-use collected materials.
- A6 Not convinced, or aware, of what good it does or what difference it makes.
- A7 Don't get positive motivational reward from recycling.
- A8 Don't feel negative or guilty about not recycling.

## 3.2 Behaviour change – achieving 'consistently competent recycling behaviour'

Another innovation in this research has been to introduce the idea of 'recycling competence' as a way of better understanding the barriers people face when trying to recycle. From the list above, it is evident that to achieve 'consistently competent recycling behaviour' different types of barrier need to be overcome. The four barrier categories, separately or in combination, result in households showing different 'recycling competence states', ranging from poor to good. The idea of developing recycling competence is drawn from the established learning competences model (deriving from Dreyfus & Dreyfus, 1986) illustrated in Figure 3.1 below:

**Figure 3.1:** Competences learning model



Efforts to improve people's recycling performance have much in common with efforts to improve competence in desired behaviour generally. As people learn 'the system' they move from 'unconsciously incompetent' (not aware, don't care) to eventually reaching 'unconscious competence' (embedded systematic routines that can be carried out without conscious effort). In applying this idea to household waste recycling, we are suggesting that high performing household recycling behaviour needs to become a consistent, embedded everyday routine (Level 4 in Figure 3.1), and that the learning steps along the way involve encouraging behaviour change through actions intended to improve people's 'willingness and ability' to take full part. To apply this idea more specifically to recycling, we have proposed that households can broadly be classified into seven 'levels of recycling competence'. The concluding shape of this concept of recycling competence levels is set out later in Chapter 7.

## 4.0 Methods

### 4.1 Sampling frame

The brief for the field research was to cover nine separate sampling points where a multi-material kerbside recycling collection service is being provided but where the overall recycling rate is lower than the national average (suggesting that householders were not using the service as much as they possibly could in 2006-2007). Allowing for a regional geographic spread, and diversity in collection scheme type and taking account of a list of potential local authorities supplied to M-E-L Research by WRAP (shortlisted for having recycling rates of less than 27% for the period 2006-2007), the sampling matrix agreed with WRAP for this research is shown in Table 4.1 below.

**Table 4.1** Sampling matrix for fieldwork. WCA denotes waste collection authorities and UA denotes unitary authorities

Region	Weekly residual and fortnightly dry recycling	Weekly residual and weekly dry recycling	Fortnightly dry recycling and fortnightly residual
North West	Local authority 1 13% WCA		
North East			Local authority 2 24% WCA
Yorkshire and Humber			Local authority 3 24% UA
East Midlands			Local authority 4 26% WCA
Eastern		Local authority 5 24% WCA	
West Midlands	Local authority 6 18% UA		
South West	Local authority 7 23% WCA		
South East		Local authority 8 19% WCA	
Greater London		Local authority 9 25% WCA	
Totals	3	3	3

Resulting profile

2 Unitary Authorities

1 London Waste Collection Authority

6 Waste Collection Authorities (not London)

Arithmetic average recycling rate across all areas, based on the statistics from WasteDataFlow for the year 2006/07 = 21.9%

## 4.2 Qualitative Method

For the qualitative research, the aim was to achieve a minimum of 75 interviews in total, including a mix of ages, genders and households with and without children. The resulting achieved sample for the 72 individuals who in fact participated is tabulated in Table 4.2.

**Table 4.2:** Quota sampling grid and achieved sample for the qualitative survey

Quota sampling parameter	Quota achieved
Age profile of respondent	16-39 = 22 40-59 = 25 60-plus = 25
Gender split	Men = 33 Women = 39
Family structure	Children / others in household = 28 No children = 44

We undertook semi-structured in depth interviews with household waste decision-makers in each of the sampling points, using an exploratory line of discussion that probed the main stated reasons for sub-optimal participation.

The aim was to generate contemporary qualitative evidence on barriers and motivators, to supplement the knowledge from existing literature and form a basis from which a quantitative survey questionnaire would be designed. Each interview lasted between 30 – 45 minutes. Some (40) were part-recorded to provide selected depth text transcript where this illustrated key findings.

The results have been processed thematically around the barrier categories identified in the literature review. Data in the form of key phrases were manually abstracted from the scripts using the four principal barrier categories set out in the conceptual framework in Section 3, to organise the data into separate themes. These are: **situational** – relating to the environmental and location enablers (motivators) and disablers (barriers) to recycling; **behavioural** – relating to the different lifestyles, social and domestic patterns that act as enablers (motivators) and disablers (barriers) to recycling; and **knowledge** – which covers the cognitive factors of knowledge and awareness, again acting as either enablers (motivators) or disablers (barriers) to recycling, and finally **attitudinal** – relating to the motivators and barriers to recycling derived from respondents beliefs and values.

Further analysis was then based on key word or barrier category. Several quotations are used in the report of results in the following Section 5, to illustrate in the words of the respondent; both the frequently made observations about the general barriers people face, and also the less frequent or locality specific observations which point to more particular types of problem.

The findings of the qualitative research are of substantive interest in their own right, as insightful research evidence. The findings were also then used as the basis for designing the standard household face-to-face questionnaire survey as described below.

## 4.3 Quantitative method

For the quantitative survey, the sample structure was based on 167 completed face to face interviews in each of the nine local authorities, based on the random walk sampling technique working in 10 randomly selected sampling points drawn by postcode from the Postal Address File lists of postcodes for each authority. From this approach we subsequently achieved a demographically and geographically random sample of 1,512 residents across the sample frame set out above. All interviews were carried out with the person 'responsible or jointly responsible' for dealing with the household's waste. This is in line with WRAP guidance on measuring the

prevalence of committed recyclers. The respondent profile is consequently representative of waste decision makers, not the general population at large.

A quantitative face to face interview questionnaire format was designed based on findings from the qualitative research reported here, and from research identified in the literature review. The wording of the full questionnaire is presented in Appendix B for reference.

Early in the questionnaire the household's committed recycler status was established, by asking the three key Recycle Now metric questions. In addition to identifying committed recyclers, not committed and non recyclers in the standard way, a new category has been developed for this research called '**super-committed**' to recycling. This is a sub-set of the 'committed recycler' group with the most ardent support for recycling. It is calculated using the three core WRAP committed recycler questions but only respondents that answer in the following way can be defined as 'super-committed' to recycling:

- if question1 'How important is recycling to you personally' gives rise to the response: '**Very important**'; and
- question2 'Attitude to recycling' gives rise to the response: '**I recycle even if it requires additional effort**'; and
- question 3 'How much do you recycle?' gives rise to the response: '**I recycle everything that can be recycled**'.

The value of creating a definition for this new sub-group is that there are significant differences in the prevalence of barriers between the super-committed recyclers and other recyclers in the committed recycler group, as the results reported later show. This research found that super-committed recyclers (defined by the WRAP metric questions) can be both "broadly competent" and "complete recyclers" when considering the competences model.

The results from the quantitative research are reported in detail in Chapter 6, and frequency percentages from the sample as a whole are shown on the Marked-up Questionnaire (MUQ) in Appendix B.

## 5.0 Results: Qualitative Evidence on Barriers to Recycling

### 5.1 Introduction

Here we present the results of the qualitative investigative research, drawing together our analysis of the detailed accounts respondents have given on the barriers that constrain their recycling. These are listed in the order already laid out:

- Situations.
- Behaviours.
- Knowledge.
- Attitudes.

Overall, most of the respondents described the importance of environmental issues and the need to reduce the amount of waste being sent to landfill, although that knowledge did not automatically transfer into segregation of their waste for kerbside removal. A mixture of reasons were given by the respondents for not recycling all their waste including apathy, tiredness, lack of time, inconvenience and poor service provision. Amongst those who declared themselves as non recyclers, there were still examples of informal reuse (termed recycling by householders), where they passed on unwanted clothes, shoes or household goods to friends, relatives or charity shops.

As the four barrier categories are not mutually exclusive, and individuals experience barriers ranging across all four, we conclude this section by providing profile case studies of individual people who show just how these barriers are related to their own basic lifestyle and outlook. The profiles show the range of behaviours, contexts, lifestyles and situations which bring the barriers discussion to life, and highlight the 'whole life' circumstances that can create for that person a vast bundle of interlinked barriers to recycling. Throughout this chapter, direct quotes from respondents are italicised and followed by information about the gender of the respondent and the local authority area within which they reside.

### 5.2 Situational Barriers

These are the motivators and barriers to recycling derived from external environmental 'enablers' and 'disablers' – terms conventionally used to describe aspects of the physical situation in the world about us that help (enable) or hinder (disable) people from recycling. An obvious area for this is the actual type of household collection scheme provided. During the in-depth interviews a range of local authority schemes were encountered. Some authorities provided wheelie bins; others black sacks stored in black bins; some provided box containers for paper, glass and plastic whilst others only provided paper recycling facilities. Respondents were aware of these differences and some made observations about the quality of their own service compared to what they perceived other areas to be receiving. In these instances it was suggested that respondents were less inclined to bother recycling if they felt they were not receiving a good quality of service.

Recurring barriers to recycling that came out of the in-depth interviews relating to external environmental enablers and disablers were:

- unsuitable recycling containers;
- unreliable collection scheme;
- inconvenient bring banks;
- limited range of materials collected; and
- issues of smell and hygiene.

#### 5.2.1 Suitability of containers

Evidence shows that there is potential for a good kerbside collection to get non-recyclers recycling. Getting the container right for the collection would be a good start. Many respondents interviewed thought that the recycling containers they were provided with were unsuitable. However, there was not always consistency in the container related barriers that were cited by different people.

In windy, open and exposed areas, some respondents complained that their recyclables blow out of their boxes and litter the streets, and in some instances this was cited as reason for not putting their recycling out. Larger families who use a lot of wrapped products complained that they don't have enough room in their box for all their recyclables which means they end up putting materials that could be recycled into the residual bin. Where plastic or blue bags are provided for paper respondents noted how the paper blows around if there's not enough weight on it and the bags can tear or disappear altogether. Again, in some instances it was noted that due to these problems residents were discouraged from participating fully in the recycling scheme.

There seems to be a strong link between being provided with a suitable container and feeling encouraged to recycle more:

A wheelie bin, rather than an open box, would be **more convenient** to use and would encourage you to recycle more. Female, 29, house share, Local authority 6

A lot of frustration with the inconvenience of the service being received was expressed during the interviews:

The thing that I find hardest is **the paper blowing about** all over the street. The council could make it easier by giving out a lid and another box – people leave what doesn't fit in their box by the side and it blows around. Female, 60+, lives with husband, Local authority 5

I don't put my blue bag out for the council (well it's actually torn, we don't have one anymore); **it can blow around**. Female, 32, Local authority 3

The issue of storage space was undoubtedly seen as an inconvenience and barrier to recycling:

When **it starts overflowing** you just think, 'I can't be bothered. Where am I going to store all this?' Family of 4, keen recyclers, Local authority 6

### *5.2.2 Reliability of collection scheme*

Some respondents said that they thought the recycling wasn't collected frequently enough and so they often ran out of room in their collection box. Some respondents, on missing a fortnightly recycling collection, will put their recyclables in with their general refuse to be collected the next week. This problem is linked to the size of the boxes and/or the number of boxes for each household. Some people expressed a need for reminders of the collection sequences:

The **bins aren't big enough** for a family of six / a fortnightly collection isn't often enough. Male, 40-59, Local authority 2

It's **not easy to remember** when to put right bins out – I often then throw recyclables in with the general waste. Female, 16-39, Local authority 3

I get put off by the **lack of reliability of the collection service**, I have tried to get boxes but they haven't been delivered. Male, 26, lives with parents, Local authority 6

A few respondents cited problems with the bin men not collecting properly or even breaking the boxes or losing the lids. Some said they'd had problems with people stealing, moving or contaminating their bins/boxes if they've been left out overnight before the collection day. There were a couple instances where this was enough to deter a respondent from recycling as they felt it was just all too much bother, though in most instances respondents were able to provide their own solutions to the problems encountered.

Sometimes they pick up next door's [recycling], **miss mine** and pick up the next one. Female, 40-59, Local authority 5

The **bin men cracked our blue bin** by chucking it back from the road. Male, 60+, Local authority 2

**Kids used to mess the bins about** if they were put out the night before, so now I put them out early morning. Female, 16-39, Local authority 6

### 5.2.3 Bring banks and recycling centres

Where only a limited range of materials are collected at the kerbside, some people make the effort to use public recycling centres (either a special trip or combined with another journey) to deposit their recyclables. But for many, this is too much bother and inconvenience if the centres aren't nearby. Others simply aren't able to do this as they don't have a motor vehicle to take their recyclables.

The recycling of those cartons is only possible if you take them to a designated specific area. If you have one close at hand that's fine. But if it means a car journey... then that's off-putting. Male, 60+, Local authority 6

Local authority 2 residents repeatedly mentioned issues around recycling glass (which is not collected kerbside) and the following quotations show how their experience influences behaviour and future negative attitudes to recycling.

We have to take the bottles somewhere; **there isn't a collection for glass**. Female, 60+, Local authority 2

Having to take glass to bottle bank may put people off recycling it. Female, 16-39, Local authority 2

Glass normally goes in the general waste. **I don't know where the local bottle bank** is round here. Female, 16-39, Local authority 2

Public recycling centres, such as supermarket banks and household waste recycling centres should be well managed and maintained to encourage people to recycle. Some respondents were put off using these facilities, which are necessary for recycling where certain materials aren't collected at kerbside.

We would use the local facilities at the Co-op, but these often get very full with lots of boxes and bags of bottles and you **just think "am I just making it worse?"** The facilities aren't well enough managed which puts you off using them. Female, 29, house share, Local authority 6

The staff that works [at the HWRC] are ignorant; they never offer to help you. If you ask where things go they just grunt and point, they don't help you at all. **That really does put you off wanting to go and recycle anything there**. Male, 40-59, Local authority 1

### 5.2.4 Range of materials collected

Informed respondents are displeased when there is a major category of recyclables left out of their kerbside collection, e.g. glass, metal or plastic, especially when another council they may know of will collect that material, and they are not told why there is a difference. Others know that lots more can be recycled, e.g. batteries, plastic bags and juice cartons, and are unhappy with existing facilities for those (especially with Tetra Pak recycling centres being few and far between). This is especially a problem with plastic packaging, where lack of specific information means many residents put out any and all of their plastics for recycling, whilst others put out none for fear of contaminating the waste stream.

I would put plastic trays and plastic sacks [e.g. from gardening] in with the plastics recycling. Male, 60+, Local authority 5

I'm not entirely sure whether I should recycle those cartons or not, so sometimes I do just throw them in [the general refuse]. Female, 16-39, Local authority 3

### 5.2.5 Food, smells and vermin

There is a perception that waste can attract hungry animals, such as cats and foxes, which tear open bags and strew litter across streets. Respondents noted that in the summer, flies, wasps and maggots can gather around bins, especially if they are dirty:

Dog food tins, that sort of tin that smells, I don't [recycle], I put them in the bin, which is a shame because I use quite a few tins. Female, 40-59, Local authority 6

We get terrible flies in the summer. Female, 40-59, Local authority 5

Residents without a garden (to use any home composted materials in) or a food waste collection, have to put their food waste in the general refuse. Some people with one or both of these said they tend to use the residual bin for food waste nonetheless because it is easier to do so than put the food waste somewhere special.

Food waste has to go into the bin, our garden is paved. Female, 16-39, Local authority 6

Food waste is quite hard to recycle. You can buy a compost bin, but we just never have. Female, 16-39, Local authority 6

### 5.3 Behavioural Barriers

Behavioural patterns encompass lifestyle, social and domestic enablers and disablers. Some people do not have the space to think about recycling, others do not have the space to store lots of boxes and waste. One striking feature arising from the in depth interviews is the aspect of personal and individual cost - meaning cost in the sense of time and convenience - needed to be a good recycler. Many people mentioned the chore of rinsing glass and plastic items compared with the simple quick act of placing paper into a box. This section shows the importance of seeing barriers in terms of personal cost and convenience. There are population segments such as the elderly or new tenants who describe more specific barriers.

Recurring barriers to recycling that came out of the in-depth interviews relating to lifestyle, social and domestic enablers and disablers were:

- cost in time and convenience;
- cost in washing out food containers;
- cost in finding storage space;
- household tenancy; and
- physical difficulties moving recycling containers.

Findings related to each of these areas are presented in the five following sub-sections.

#### *5.3.1 It is just not on my agenda – cost in time and convenience*

It was evident from the interviews that for some people recycling was not on their agenda at all. This was either due to them believing they did not have the time to sort their rubbish, or because they are not tuned in to the relevant publicity highlighting knowledge and information needs. In other cases it was just down to forgetfulness.

The council need to make it more clear the services they are providing. Put posters up around the local area because you don't always read what comes through the door. Female, 26, Local authority 1

I have had leaflets through the door, I put them in the bin, and they don't make me recycle more. Single mum, 3 kids, non-recycler, Local authority 1

A frequent explanation for not recycling or it not even being on their agenda was that the respondent had family responsibilities; especially several children which takes up all their attention and time. During the interviews, many of these respondents referred to the cost of sorting and separating waste. For some people, it was felt it had all become too complicated. This was emphasised by mothers in Local authority 6 and Local authority 1:

My main thing is not having the time. Life is too hectic. Single mum, 45, 4 kids, Local authority 1

If we didn't have this conversation today, recycling would never have crossed my mind. Family of 4, non-recyclers, Local authority 6

What makes it hard to recycle? Not having the utilities – with 3 kids it is not the first thing on your mind. Family of 5, Local authority 6

I haven't got the time with all the kids; I haven't got the time to sort waste. Single mum, 45, 4 kids, Local authority 1

What puts you off recycling? Needing to separate waste, I have no time or energy to do it. Family of 4, non recyclers, Local authority 6

Uncooked fruit and vegetables are easier to just throw away. Male, 40-59, Local authority 6

### *5.3.2 The cost - washing out food containers*

Those people who have a positive attitude and have tried to participate find there is a cost. Some people do not like cleaning food off containers to put them out for recycling and so they continue to put lots of recycling into the normal residual bin because of this. Paper is the exception, because it is clean. This is the section in the interview where people talk in terms of hassle, time and effort. The following quotations have been extracted from the interviews to illustrate the similarity in the points that were made:

Paper is not an issue really, it doesn't feel dirty, it isn't awkward, it's neat, tidy and clean to tuck away. Female, 29, house share, Local authority 6

It is **the effort** to rinse recyclables which puts me off. Male, 33, Local authority 5

It **takes time** to remove sauce dregs from bottles, I need educating on a good technique. Male 40-59, Local authority 1

Washing tins out is the hardest thing. It can be horrible and you can cut yourself. Female, 60+, Local authority 3

It is **just a hassle**, I **haven't got time** to be washing out jam jars and marmite jars. Single mum, 45, 4 kids, Local authority 1

There comes a point when even willing households weigh up the effort that is required as recycling becomes more complex:

The **more complicated** recycling is, the less inclined I am to do it. Male, 26, lives with parents, Local authority 6

### *5.3.3 The cost - storage*

The waste collection systems have become more complicated, some waste is collected weekly for other items it is every two weeks. This means people have to store their segregated waste in containers. We found some people in local authority 2 who had three wheelie bins outside their front doors, which they said was unsightly and inconvenient. Some people described the inconvenience of storage both inside the house and outside prior to removals at the kerbside and the more complicated it becomes the more people are put off, as illustrated in the following extracts from the in-depth interviews:

The boxes are very large; **they do take up quite a bit of space** in the garage. Male, 16-39, Local authority 3

I **don't want to have loads of litter in my house**. It builds up. It takes a lot of time and a lot of space as well. Female, 16-39, Local authority 6

When it starts overflowing you just think, I can't be bothered, **where am I going to store all this**. Female, 16-39, Local authority 6

### *5.3.4 Household Tenancy*

Our in depth interviews were able to expand on the problems that new tenants or tenants of rented property may face, possibly in an area of high turnover. Many renting households pointed out the practical difficulties they had in obtaining information about recycling when they first moved into their new property. A lack of information for

new tenants about the services they are provided with was found to be a common barrier for not recycling and highlights a problem that councils need to address:

I phoned up to ask for recycling bags like my neighbours have and they said I couldn't have one because they had already provided one to the house, we live in a rented property! They need to accommodate for that. Female, 29, house share, Local authority 6

Information about what you can and can't recycle should be provided with it in mind that a lot of people rent properties and households need to be updated regularly. Female, 28, Local authority 6

I had no information when moving into my current home. Information is being distributed to properties, not to people. Male, 40-59, Local authority 1

### 5.3.5 Physical difficulties

Another barrier to recycling that was pointed out by the more elderly respondents in particular was the difficulties encountered by some people when trying to move their recycling containers from the house to the kerbside and back again. We spoke to some people in this category who had friends or neighbours they could rely on to help them but some others just felt they had to struggle on their own. As most kerbside collection schemes offer an assisted collection for the infirm and elderly, the real barrier in this case is a lack of promotion about the assisted collections for those that need it. The following quotes illustrate these points well:

Moving the bin to the kerbside without wheels is **difficult**. Female, 60+, Local authority 3

Getting older means it's **more difficult** to lift things. Male, 60+, Local authority 6

I **couldn't carry** a box down the driveway... so I got a friend to help. Female, 40-59, Local authority 5

## 5.4 Knowledge Barriers

This covers cognitive factors of knowledge and awareness. There is a simple assumption that if people know about something, or how to do something, then they will act on that basis. As we have shown earlier, there are other issues which may mean that behaviour is negatively influenced by knowledge, for example if you know you have to wash out tin cans and you do not have time, it becomes an inconvenience and you may decide to put them into the residual waste container instead. This section is based around three main barriers: people being confused about what can and can't be recycled; people not receiving, understanding or being interested in promotional material; and people not knowing what to do with materials that are not collected at the kerbside.

### 5.4.1 Confused messages

A lot of people still say they are not well informed about what to do. This seems to be especially the case with plastics and may be because there are so many different types of plastic.

There is not enough information about **exactly what can and can't go into** the recycling so it tends to all go into the general waste. Male, 40-59, Local authority 1

People aren't informed about **which plastics can and can't** be recycled. Female, 40-59, Local authority 3

All the plastics in the household are put out for recycling because **I don't know whether or not** they can be recycled. Female, 29, house share, Local authority 6

**Very confused** about plastics so that is one thing I am not good at recycling. Family of 4, keen recyclers, Local authority 6

### 5.4.2 Promotional material

Most households could expect to receive written information from their council when a new waste collection box or system is introduced and regular updates on collection dates. Whether they read it or not is a different matter. Some people expect to see recycling information in other formats, such as on television as we noted in section 5.4.3.

I have had leaflets through the door, I put them in the bin, and **they don't make me recycle**. Female, 33, 3 children, Local authority 3

**I don't really notice much publicity**, it is not public enough. It certainly is not visible in the work places where people spend a lot of their time and where a lot of waste is generated. Female, 29, Local authority 2

I don't know exactly what to do, **I don't think it is very well publicised**. Single mum, 24, 3 children, Local authority 2

There is **a lack of information**, no services, no containers; a lack of consistency, trying to take part is a nightmare. Male, 26, lives with parents, Local authority 6

Sometimes what people read in the local press is negative, emphasising the punitive side of the council waste collection service;

There needs to be **specific guidelines** over what can and can't be recycled, especially since people are being fined. Male, 40-59, Local authority 1

New forms of communication are important, but some people can't get through to their council or find WRAP site online;

**I have tried to find information on line and have struggled**, there isn't any publicity, advertising is not local enough or in your face enough. Male, 33, Local authority 3

I have tried to inquire but **it is too difficult to find information**. Female, 34, 3 children, Local authority 1

I have **never seen any advertisements** about recycling. Female, 38, 5 children, Local authority 1

The only publicity I have seen is **the van going round**. Female, 38, 5 children, Local authority 1

### *5.4.3 What do we do with materials which are not collected from the kerbside?*

Although kerbside segregation has evolved to include glass, plastics and paper, there are still other materials that people need advice and information about. In the interview we worked through a long list of types of waste and asked whether the respondent knew how to recycle each one. The following quotations give examples of this knowledge gap for more complex materials.

I wasn't aware **shoes** can be recycled. Male, 40-59, Local authority 6

I didn't know **batteries and printer cartridges** could be recycled. Female, 40-59, Local authority 3

I don't want to, but I throw my **carrier bags** in the bin, I don't know what else to do with them. Family of 4, keen recyclers, Local authority 6

What do you do with **Christmas Crackers**? Male, 40-59, Local authority 2

I am unsure whether or not **tetra Packs** can be recycled so I throw them in the bin. Male, 40-59, Local authority 5

Would I put **fertiliser bags, plastic trays and sacks** out for recycling/ I don't know, I am confused. Male, 40-59, Local authority 5

For example, **Pringles cartons** have card and metal, what do you do with them? Male, 60+, Local authority 6

One thing I am not sure about recycling is **toys**, especially if they are broken. Single mum, 24, 2 children, Local authority 1

## 5.5 Attitudinal Barriers

There are motivators and barriers to recycling that are derived from people's beliefs and values. Recurring barriers to recycling that came out of the in-depth interviews relating to beliefs and values were:

- scepticism that recycling works/ makes a difference;
- feeling unappreciated for recycling efforts;
- disbelief that recycling is an urgent priority due to the infrequency of it on television; and
- resentments about using a substandard service.

On the reverse side the motivators were found to be:

- believing that recycling works/ makes a difference;
- feeling appreciated for the efforts made to recycle;
- seeing more about recycling on television; and
- feeling good about having a reliable and convenient service.

### 5.5.1 Making a difference

What happens to the waste is a recurring question that informs people's attitudes in this section. On a local level, respondents often said that they would like more feedback about what their recycling efforts were achieving. The majority believed in recycling and re-use, but not all were fully convinced that because they put their rubbish in a recycling box rather than a residual waste container, they were actually making a positive contribution to society. This was because they felt they had not seen or heard enough about what actually happens to the waste they set out for recycling. Respondents did not feel that just understanding the processes the waste goes through once collected was enough however, many suggested that they wanted to see more tangible results involving real life examples of how recycling is contributing to the environment, both locally and globally.

The following quotations illustrate the points that were made and highlight certain information needs that would be useful to include in marketing campaigns:

It would be interesting to read some of the figures about what percentage of what I put in, **what happens to it**, how expensive it is, what the environmental impact has been. That kind of information is hidden unless you go look for it. If I feel little or no difference was being made I'd be less likely to bother. Female, 29, house share, Local authority 6

What puts me off? A lack of knowledge about it and a lack of information about the results, like **what happens to it?** Am I making a difference? It is important to feel you are making a difference. Female, 26, Local authority 5

There isn't enough publicity about the reasons **why it is good to recycle** to dispel 'the myths', to encourage people to make it a habit. Female, 45, Local authority 5

A certain amount of cynicism towards the local councils was expressed:

If people make an effort to recycle but only half of what they put out is actually recycled, that is very demotivating. Female, 34, Local authority 3

You hear rumours that recycling doesn't work or uses a lot of energy so it isn't that environmentally beneficial so it is important to know what happens to all the materials once they are collected. You need to know **it isn't just the council trying to look good**. Female, 25, shared house, Local authority 5

Some examples of good practice were provided by a few respondents:

At the tip they provide information on how much was saved on landfill, this is good, it shows you are not doing it in vain. Family of 4, keen recyclers, Local authority 6

It was also highlighted that linking people's waste with some local projects and products would be a big motivator to recycle more:

At a local level it would be a really big motivator to know **what local projects were benefiting** from recycling in Local authority 6 and to see something tangible. It would be useful to know **what happens**, which companies are doing it [making recycled products] and what they are making. I would be more likely to use a shop that was using recyclable goods from recyclable waste in Local authority 6. Female, 29, house share, Local authority 6

### *5.5.2 Feeling appreciated*

A point that was mentioned by several respondents was that they don't feel much gratitude from the council for recycling. The suggestion that was made was that a bit of thanks and appreciation would be a motivator and encourager to recycle more. This follows on from above in that people are keen to hear now about what has been achieved and instead of being filled with instructions on what to do, they want a bit of positive feedback for what they have done. These two quotes illustrate these points well:

It may be childish, but **I want to be congratulated** by the council. It is important for the community spirit, to motivate people and encourage them. We need some feedback about how it is making a difference. Female, 28, Local authority 6

There should be more information about **why** people recycle, **why** it is a good thing, more evidence, not just being told what to do without any explanation. Male, 33, Local authority 3

### *5.5.3 The influence of television and salience of waste issues*

Some people, particularly non recyclers, said that if recycling was so important and is actually being effective they would be seeing more about it on television. While the majority considered the disposal of society's waste a significant environmental concern, it was not at the forefront of their minds. It seems the transient nature in which waste issues are considered are insufficient to establish and maintain habitual patterns of recycling.

Television was particularly noted as the most effective and possibly the only way to target the non recyclers that have no interest in what comes through the letterbox or local newspapers. Interviewers reported that in some households, the television was left on even during the interviews; this was particular to areas of social deprivation in Local authority 1 during day time interviews, when children's television was left on for toddlers, or children that were off school sick. The following quotes illustrate this point well and highlight the information needs that exist:

There **needs to be more on telly**, more adverts showing the benefits and what actually happens with it, the information needs to be provided. Single Mum, 3 children, non recycler, Local authority 1

It can't be that important, because at the end of the day **they don't put advertisements on the telly** about it, if it is so important they should put advertisements on the telly, shouldn't they? Single Mum, 5 children, non-recycler, Local authority 1

### *5.5.4 Attitude towards quality of kerbside service*

People's attitude towards the quality of their kerbside scheme was evidently either a motivator to recycling or barrier, depending on their perception of the standard of service they received. Several people blamed the local authority for their poor recycling performance and held an attitude of: 'If the council aren't pulling their weight to provide a good service, I'm not going to waste my time and effort trying to recycle'. It was clear that a perceived poor service was a barrier to recycling (though it should be noted that interviews were only conducted in areas where a multi-material kerbside collection was provided by the local authority) and a good service was a motivator. The following quotes illustrate these points well:

More people would recycle if the services that were provided were more effective; people are **encouraged** by a good infrastructure and service. Male, 26, lives with parents, Local authority 6

It is messy things and the **lack of support from the council** that puts me off recycling. Female, 42, Local authority 2

When the council appear to be indifferent in providing replacement containers there is a corresponding negative attitude to recycling:

I am sick of phoning and asking the council for containers. Single mum, 24, 2 children, Local authority 1

## 5.6 Personal Profile Case Studies

We have illustrated our analysis with individual quotations. In this section we present case studies to show the social context and demonstrate how recycling behaviour is made up of a complex mixture of attitudes, local circumstances, knowledge and individual behaviour.

### **The Profile of a Complete Recycler - Local authority 3**

Local authority 3 runs a fortnightly dry kerbside collection for glass, cans and paper. Glass and cans are collected in a green box or slim bin and paper is collected in a blue bag or slim bin. Residents are also provided with an alternate weekly garden waste and thin cardboard collection in between fortnightly residual waste collections.

Respondent profile: Mother; Family of three; Lives with husband and twelve year old daughter; Acorn 3 household; keen recycler

#### **Attitudes**

I am a keen recycler and recycle as much as I can with the service I am provided with. I recycle because I enjoy doing my bit to help the environment. If I recycle, less waste will be sent to landfill and there will be less gas going into the atmosphere. It is good to re-use our materials. As far as I am aware, we have no plastic recycling facility. I wish we did, because it is important to recycle plastic, it doesn't degrade easily. The council provided equipment and bins so I believe it is our duty to recycle. There is nothing that puts me off recycling, though it did take a bit of getting use to. I am now training my husband and my daughter, and my mum and dad! I want to teach my daughter, it is for her future. Elderly people say 'why should we start now?' That is why I start with my daughter! I work full time but not having the time to recycle is never a problem; washing cans and jars can take some time but we are use to it. I have heard a rumour that the recycling was not actually recycled, but I still do it, I guess it is a bit like voting, you just do it. It can be a reason why others don't bother though. Some people don't bother because of laziness and they want to be left to carry on in their old ways.

#### **Situations**

The council do make it easy enough to take part, though the worst thing about the services is the local tip. It is awful; the staff are very ignorant and they don't help at all.

#### **Knowledge**

I have received publicity leaflets through the letter box, it makes it clear, and I think this publicity is fine. I prefer to get information from the council; we don't take too much notice of the media. I am not sure about drink and milk cartons, but everything else I am okay with, apart from plastics. There are no facilities at all. The nearest place to take any plastics is [a neighbouring city], there is nothing in [our Local authority]. This is what I want. In the kitchen I put egg shells and vegetable peelings in the normal bin as I am not sure if they can be recycled and I can't compost them as we only have a concrete yard.

#### **Behaviour**

The most confusing thing is remembering what day the collection is, is it recycling or residual waste week? This doesn't put me off though! If shoes and clothes are in a good condition I will take them to a charity shop, otherwise they go into the residual bin. I recycle, rinse and sort on a daily basis; it is not a problem which room the waste is coming from. To tackle hygiene issues we give our bins a quick rinse and find that it is fine. Space can be a problem, but we have put up with it, we have made space for 3, not 4 bins, and we have outside access to the back yard. I can sometimes forget what day to recycle, but I check with the neighbours and we get stickers to stick on the bin lids to remind us.

### **The Profile of a Broadly Competent Recycler - Local authority 6**

Most households in Local authority 6 now have a fortnightly doorstep collection service that collects paper and card in a blue box and glass, cans and plastic bottles in a green box. There is also an alternate weekly garden waste collection for which green sacks are provided.

Respondent profile: Retired family man; Owner of a semi-detached property; Acorn 3/4 household; recycler

### **Motivation and Attitude**

I recycle because it helps saving the environment by re-using the world's resources. It is very important to recycle even if it requires additional effort. I recycle a lot, but not everything because there are some things that the council will not accept. It makes me feel better about myself to do something like this.

### **Situations**

The council have done a lot to make it easier to recycle, but it is still not as easy as it could be. They should have more frequent collections.

### **Behaviours**

I have a paper shredder for personal paper, all my shredding goes into the recycling. I have a long garden but I still don't feel I have enough room to home compost, so I don't. I use my car to take some things to the local recycling centres. We have organised a good system in the household for segregating waste into the appropriate bin. The only real issue I have is finding space to store the containers, especially at Christmas time. I don't understand why there are fewer collections over Christmas, at a time when the most waste is being produced.

### **Knowledge**

Knowing what exactly you can recycle and what you can't recycle is the biggest problem. For example Pringles cartons contain metal and very thick cardboard which is difficult to separate. What do you do about cellophane, grease proof paper, paper or card with residual food? What I know about recycling comes mainly from council leaflets delivered to the house. The leaflets are not comprehensive but are at least a guide. The local press also have information, but I've not seen much on television about recycling; what I have seen are news stories about landfill dumps and complaints about uncollected bags /boxes littering the streets.

### **The Profile of an Aware but Inactive Non-recycler - Local authority 1**

In Local authority 1, residents are provided with either a purple box or blue bin for a multi-material collection of glass, cans, and paper, cardboard and plastic bottles.

Respondent profile: Single mum; three small children (10, 7, and 7 months); Acorn 4 household; non-recycler; feels guilty for not recycling

### **Motivation and Attitude**

It is terrible and I know I should recycle, I feel I should, I feel morally obliged, but I don't use many tins. Nothing really puts me off recycling, it is just not something I have got round to doing. I never got a recycling box; I think if I had one I would.

People recycle to save the atmosphere and landfill sites, also it is safer for the bin men. Recycling should be a civic duty, but there is no law to recycle so being told to recycle by the council is not very important. The council could make it easier by putting more adverts on the TV and telling you more about the benefits. I don't feel judged by other people about not recycling and if I did, other people's judgement doesn't bother me.

I really do have the time to recycle but what puts me off is keeping stuff in the kitchen, the kitchen is too small. Sorting the waste is a hassle and not knowing enough about the benefits makes me less motivated. I do believe the material is actually recycled but I think not being sure puts some people off.

### **Situations**

I have no space for recycling containers in the house; I have no space for anything! Smells and hygiene issues do put me off. They should provide boxes with lids as pets root around my bins, this puts me off too. Also I worry about my children getting hurt if there is a lot of rubbish lying around.

### **Knowledge**

I have received leaflets through the door but I tend to put them in the bin without reading them, they don't make me recycle more. I get confused about what to do; I don't know what goes in the box. I don't know what is meant to go in each container. I need more information about what to do. I don't know what happens to materials once they are collected for recycling but I would like to know, I think if I knew more about it I would recycle more.

## **Behaviours**

The hardest thing about taking part in the service is finding the time to do it. With 3 kids, I don't get a minute; it is quicker to just put it all in the bin. The best thing about the service is that they do come round every week and they provide containers so there is no mess in the street. The worst thing is that other people see how much you are drinking and says we could do with a bin that has a lid on it!

It is very easy to recycle paper, but I throw it all in the bin anyway. I don't recycle so I throw all the materials in the residual bin. I take some clothes to charity shops. It is the inconvenience and a 'can't be bothered' attitude that puts people off recycling. To overcome these barriers there needs to be more on the telly, more adverts showing the benefits and what actually happens with it. Also provide proper facilities.

## **The Profile of a Recycling Unaware Non-recycler – Local authority 6**

Most households in Local authority 6 now have a fortnightly doorstep collection service that collects paper and card in a blue box and glass, cans and plastic bottles in a green box. There is also an alternate weekly garden waste collection for which green sacks are provided.

Respondent profile: Young mother and 3 month old baby, with partner, living in short let rented semi-detached house; Acorn 5 household; non recycler

## **Motivation and Attitude**

I don't really think about recycling. I do pass on unwanted clothes, shoes and household or personal goods to family and friends – that is what I understand to be recycling. I know recycling is good for the environment, it is helping land fill and also helping in making 'new stuff'.

## **Situations**

In this area the council provides a black sack for waste, a few weeks ago we were delivered a new blue box for paper and cardboard packages and a green box for glass and some types of plastics. There was some information leaflets posted through the door, and information is printed in white on the side of each box.

## **Behaviours**

I didn't read the leaflets and have put the boxes in the back garden – they are still there. So you are supposed to put your paper in the box?

All our rubbish goes into black sacks – there is no black bin for the sacks. I can't remember collection days so the waste accumulates in the back garden.

## **Knowledge**

It's not that I am not interested...it's just all too confusing.

## **5.7 Summary and Conclusions**

Key findings from the qualitative interviews emphasize the everyday situational and behavioural aspects of recycling. All the points that were made in the interviews were also covered in the literature review, showing that not a lot of new information is coming out of the recycling at home debate. A lot of emphasis was placed on the recycling services, the variability, reliability and convenience of the services, as well as the council's relationship with those who for some reason or other have not got recycling containers. A lot also came up about the day to day demands that recycling places on individuals within the household to wash, squash, sort, store and put out the material – which has been summarised in section 5.6 as costs in time and convenience.

Cross cutting many of the discussions in the interviews was the importance of information. Whilst not a lot of new information is coming out of the recycling at home debate, there does however seem to be a change in emphasis of the sorts of information respondents feel would act as a motivator to recycle more. Whilst it is well established that information about what to recycle, how to recycle and when to recycle is what is needed to get people to recycle more, there is a dimension to knowledge barriers which is becoming more prominent as people are now wanting to know more about what is happening to all the rubbish they are segregating for recycling and how this is making a positive impact in their local area. Promoting recycling for local projects that people can relate to might be more effective than the more broader and generic reason of 'climate change' which in many instances might be too large a phenomena for local people to grasp.

There is a need to fill in the knowledge gap about where the materials are going, what they are being made into and who is making them into new products. By providing more information about this, people will have a better idea about what exactly they are supporting when they do recycle and it can also serve to put an end to the demotivating belief that what they put out for recycling isn't actually recycled properly. Some examples of what respondents felt would be good practice were provided, these include: providing information at the tip about how much has been saved on landfill; providing information about the costs of recycling; providing feedback about the companies that are doing the recycling and the products they are making; and providing some evidence and information about what local projects are benefiting from recycling.

Further to these conclusions and linking to the case studies provided in section 5.6 is the notion of competence which was evident throughout the interviewing. Some people are more organised and have more interest in recycling than others. For these people recycling is a habit and has been built into their everyday living and domestic routines with kitchens organised to make recycling as convenient as possible. However, at the other end of the spectrum are people with very limited competence and no interest in recycling who haven't made recycling a habit or organised their domestic routines to accommodate for it. Where on the recycling competence scale an individual lays is evidently linked to the social demographics of the house they live in and the Acorn category in which the household resides.

Under the four barrier category heading, the key points raised are summarised below.

### *5.7.1 Summary of situational barriers*

To summarise, the recurring barriers to recycling that came out of the in-depth interviews relating to external environmental enablers and disablers were: unsuitable recycling containers; unreliable collection schemes; inconvenient bring banks; the limited range of materials collected by the kerbside scheme; and issues of smell and hygiene.

Key indications are highlighted in the section above for consideration when planning communications to raise people's interest in recycling. Primarily, people are encouraged by a good service and get frustrated with recycling when faced with a poor standard of service. Whilst it takes more than communications to improve the level of service residents are receiving, communications can be used to provide solutions for people who are experiencing certain problems. Discussing openly the sorts of problems people have with recycling will encourage them by making them feel they are not alone with the problem. Pointing out the direction they should go when encountering certain problems will help them solve the issue quicker and act as a motivator to use the service more. There appears to also be a need to educate and provide more information in communications about the reasons only certain recyclable items are collected at the kerbside. Updating the public about progresses made in technological developments towards the ability to recycle more items could also be a strong encouragement to them to keep up the good effort.

### *5.7.2 Summary of behavioural barriers*

To summarise, the recurring barriers to recycling that came out of the in-depth interviews relating to behavioural patterns (which encompass lifestyle, social and domestic enablers and disablers) were mainly: perceived costs in the sense of time and effort to separate waste, wash out containers, and find suitable storage as well as finding out what to do in the first place and setting up a working system in the household.

Further behavioural barriers that came up during the interviews included the difficulties people can experience (especially when moving into rented households) in trying to find out about the kerbside collection scheme and obtain containers. There were also concerns expressed about the storage of materials for recycling, it can be smelly especially where space in the household was short and when children are playing there is a potential injury risk. Another barrier to recycling that was mainly pointed out by the more elderly respondents was the difficulties encountered by some people when trying to move their recycling containers from the house to the kerbside and back again. As most kerbside collection schemes offer an assisted collection for the infirm and elderly, the real barrier in this case is a lack of promotion about the assisted collections to those that need it.

Recommendations for communications based on these behavioural barriers include the following: in order to reduce the perceived costs in time and effort people have about recycling some simple and colourful pictures making recycling look like an easy and fun thing to do might eliminate or reduce these perceptions which act as barriers; providing tips and techniques for easy and safe storage solutions as well as hygienic and (as clean as possible!) tips for washing out of containers again might reduce negative perceptions about recycling; it is also

important to promote assisted collections in communications about recycling so those that need it know that help is at hand.

### *5.7.3 Summary of knowledge barriers*

To summarise, the recurring barriers to recycling that came out of the in-depth interviews relating to the cognitive factors of knowledge and awareness were: people being confused about what can and can't be recycled; people not receiving, understanding or being interested in promotional material; and people not knowing what to do with materials that are not collected at the kerbside.

The main emphasis in knowledge barriers was that there can be confused messages about what can and can't be recycled and people want some form of clear and consistent instruction on this, especially with regards to plastics. People want to know why all the plastics can't be recycled. There is also a need for wider forms and methods of promotion (i.e. television, street posters at bus stops, posters in work places, etc) as many claim to not always read what comes through the door.

Some claim that they struggle to find information even when they specifically try to look for it suggesting that where this information is stored needs to be promoted more and made more accessible. There is a lack of knowledge and awareness about what to do with other materials that are not collected at the kerbside. This would be a key area to target in communications.

### *5.7.4 Summary of attitudinal barriers*

To summarise, the recurring attitudinal barriers to recycling that came out of the in-depth interviews were: scepticism that recycling works/ makes a difference; feeling unappreciated for recycling efforts; disbelief that recycling is an urgent priority due to the infrequency of it on television; and resentments about using a substandard service. To different extents these barriers held some influence over the extent to which respondents were making full use of the recycling facilities they were provided with.

Recommendations for targeting communications include the following: provide more than just instructions on how to recycle, feedback on how recycling is making a difference and what the recycle is being made into; congratulate the nation and local communities for the efforts they have been making to recycle and celebrate the success of these efforts; express the urgency of recycling to the public more, have more about it on television (target promotions around the time of day, for example target promotions to stay at home mums on daytime television children channels); relate to the difficulties people have with the service they receive and offer guidance on what to do about poor services. It is very important that the councils are quick to respond to people with recycling problems, questions and queries.

## 6.0 Results: Quantitative Evidence on Barriers to Recycling

This next section presents the findings from the quantitative field survey research. The overall frequency percentage results from the quantitative questionnaire can be found in Appendix B. The detailed analysis presented here centres on each of the four main barrier categories in turn, but before moving to that we have summarised the analysis of our investigation into the key differences between 'super-committed recyclers, and other recyclers in the committed recycler category. The reason for featuring this analysis is because the research has shown significant differences exist between these two sub-categories of the committed recycler group, in terms of impact that specific barriers to recycling have on these groups.

Overall, it should be noted that the quantitative analysis presented in this section of the report - despite its extensive detail - provides only a partial interpretation of the vast amount of new data collected in this research. Further additional analysis could be carried out on the existing data set to help build up further insight into the population segments experiencing the specific barriers listed here. It would then be possible to link this more closely than has been possible within the confines of this research, with the most appropriate communications messages and media most relevant to these segments and their respective principal barriers.

### 6.1 Commitment to recycling

In Section 4 above, on the methods of investigation, (sub-section 4.3) the method for defining the super-committed recycler group has been set out. Once the rule was applied, it established just under one third (30%) of respondents in the sample area are classified as super-committed recyclers and two fifths (41%) as committed recyclers. Approximately one quarter (23%) recycle (but are not committed) and 6% are non recyclers.

**Table 6.1:** Commitment to recycling

	Count	%
Super Committed Recycler	453	30%
Committed Recycler	612	41%
Not a Committed Recycler	353	23%
Non-recycler	93	6%
Total	1,511	100%

The next step has been to explore how the commitment to recycling, including the super-committed recyclers, varies according to different socio-demographic characteristics. This is valuable, because the different barriers associated with commitment to recycling (seen during the course of this section of the report) are therefore also varying according to these socio-demographic characteristics.

### 6.1.1 Commitment to recycling by ACORN category

ACORN stands for 'A Classification of Residential Neighbourhoods' and is a way of classifying small areas in terms of their different social and consumer purchasing characteristics, which has been developed by the consumer research agency CACI. The table in Appendix A shows a simple verbal description for the five principal ACORN categories 1 to 5, and the 17 subsidiary ACORN Groups organised within the five primary categories.

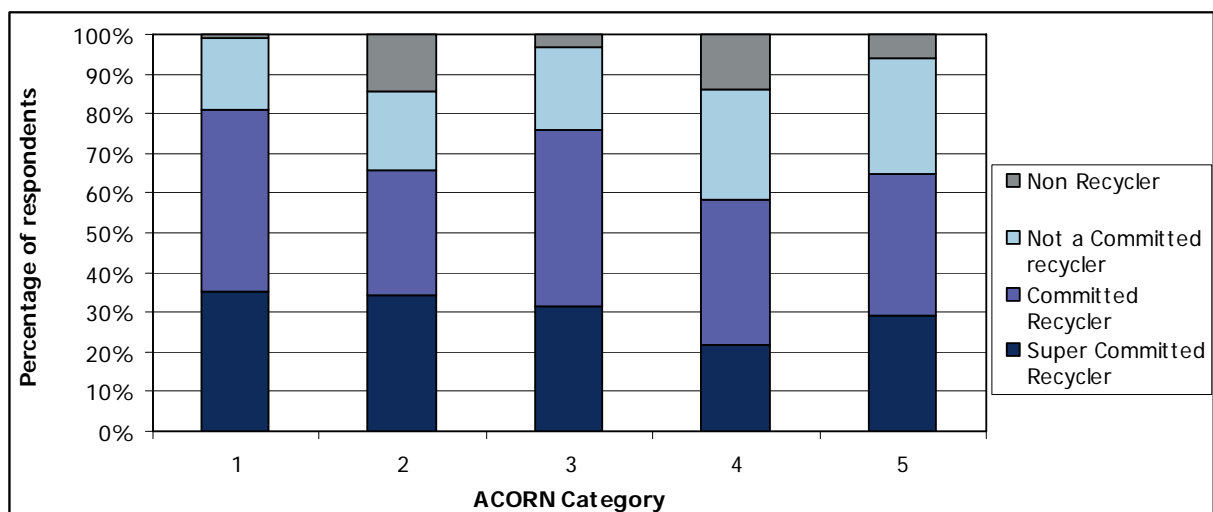
It is helpful to analyse consumer research data according to the ACORN profile of the respondents because it helps identify the population segments which might best be targeted with specific types of communications messages. However it should be noted that the following results give broad national trends only; wherever possible, local research is always best to shape and guide local communications campaigns.

When broken down by ACORN categories the results follow a pattern consistent with findings of past research with the most committed recyclers falling under ACORN category 1. Respondents in this category are named as 'Wealthy achievers' comprising wealthy executives, affluent greys and flourishing families. Overall, 99% of this group claim to recycle to some extent, with 35% of them categorised as super-committed recyclers; the highest percentage of all 5 ACORNS. The least committed recyclers are ACORN 4 respondents, see Table 6.2 below.

**Table 6.2:** Commitment to recycling by ACORN category, percentages are presented graphically in Figure 6.3

ACORN	1		2		3		4		5		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Super Committed Recycler	98	35%	33	34%	166	31%	59	22%	82	29%	438	30%
Committed Recycler	129	46%	30	31%	234	44%	101	37%	99	35%	593	41%
Not a Committed Recycler	49	18%	20	20%	115	21%	76	28%	83	29%	343	23%
Non-recycler	4	1%	14	14%	16	3%	38	14%	18	6%	90	6%
<b>Total</b>	<b>280</b>	<b>100%</b>	<b>97</b>	<b>100%</b>	<b>531</b>	<b>100%</b>	<b>274</b>	<b>100%</b>	<b>282</b>	<b>100%</b>	<b>1464</b>	<b>100%</b>

**Figure 6.1:** Commitment to recycling by ACORN category, numbers of respondents in each category are tabulated in Table 6.2



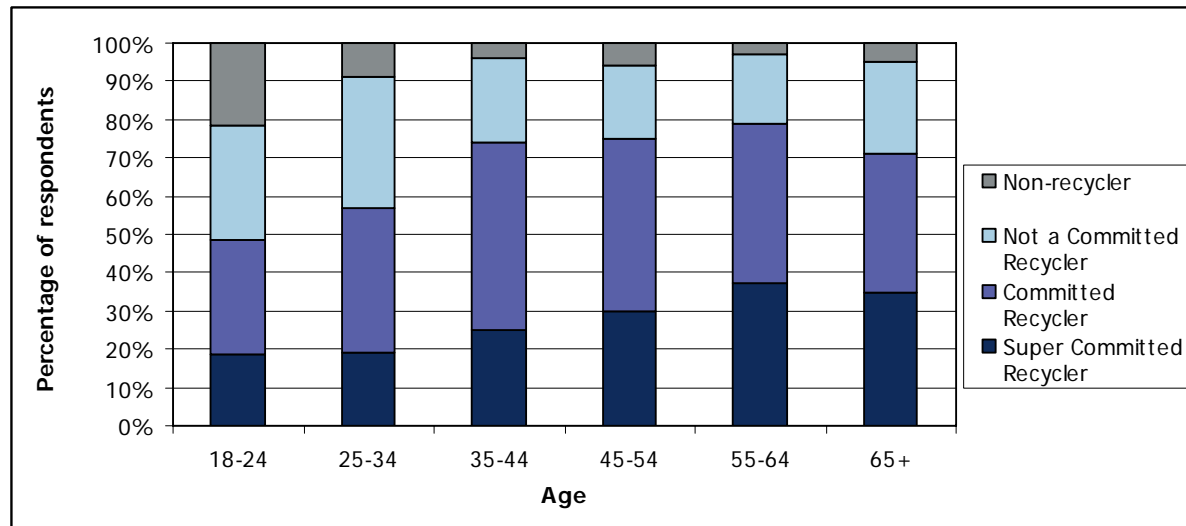
### 6.1.2 Commitment to recycling and age of respondents

Table 6.3 shows that prevalence of the committed and super-committed recycler groups are strongly related to age. Only 52% of the 18-24 age groups are committed to recycling, and only 19% are super-committed, and this group are more likely not to recycle at all than other age groups (22%). By contrast, 37% of the 55-64 age band and 35% of the over-65 age band are super-committed.

**Table 6.3:** Commitment to recycling and age of respondents, percentages are presented graphically in Figure 6.2

	18-24		25-34		35-44	
	Count	%	Count	%	Count	%
Super Committed Recycler	12	19%	36	19%	75	25%
Committed Recycler	19	30%	71	38%	144	49%
Not a Committed Recycler	19	30%	64	34%	65	22%
Non-recycler	14	22%	17	9%	13	4%
	45-54		55-64		65+	
	Count	%	Count	%	Count	%
Super Committed Recycler	81	30%	87	37%	159	35%
Committed Recycler	120	45%	96	41%	160	36%
Not a Committed Recycler	52	19%	42	18%	108	24%
Non-recycler	16	6%	8	3%	24	5%

**Figure 6.2:** Commitment to recycling and age of respondents; the numbers of respondents in each category are tabulated in Table 6.3



### 6.1.3 Commitment to recycling and property type

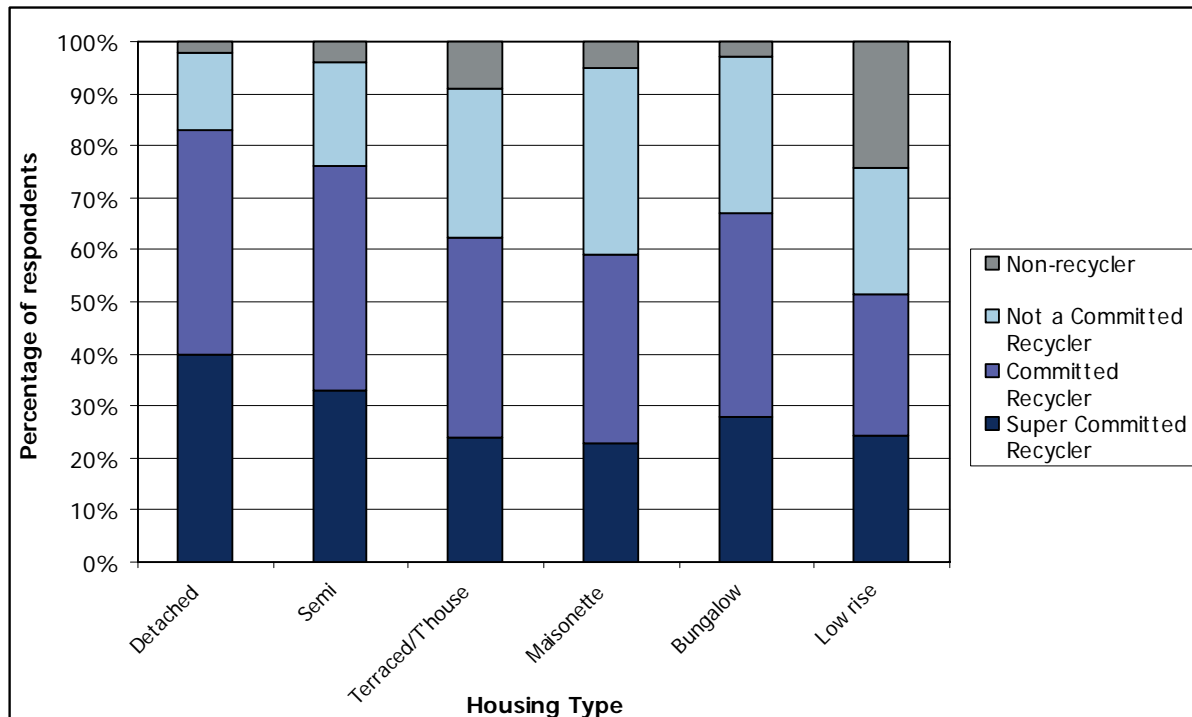
Commitment to recycling also varies strongly with property type. In detached households 83% are committed to recycling with just 2% stating they do not recycle. Semi detached households are the next likely category to be committed to recycling. Low rise flats recorded more non recyclers at 24% than other housing types, possibly associated with three main barriers:

- no collection service;
- space to recycle; and
- difficulties in carrying materials down flights of stairs.

**Table 6.4:** Commitment to recycling and housing type, percentages are presented graphically in Figure 6.3

	Detached		Semi Detached		Terraced or townhouse		Maisonette	
	Count	%	Count	%	Count	%	Count	%
Super Committed Recycler	110	40%	176	33%	114	24%	5	23%
Committed Recycler	120	43%	231	43%	188	39%	8	36%
Not a Committed Recycler	41	15%	106	20%	142	29%	8	36%
Non-recycler	6	2%	20	4%	41	9%	1	5%
	Bungalow		Low Rise Flat (under 4 storeys)		High Rise Flat (4 or more storeys)		Other	
	Count	%	Count	%	Count	%	Count	%
Super Committed Recycler	26	28%	20	24%	0	0%	2	14%
Committed Recycler	37	39%	22	27%	0	0%	5	36%
Not a Committed Recycler	28	30%	20	24%	1	100%	6	43%
Non-recycler	3	3%	20	24%	0	0%	1	7%

**Figure 6.3:** Commitment to recycling and housing type, numbers of respondents in each category are tabulated in Table 6.4



### 6.1.4 Commitment to recycling and household lifecycle

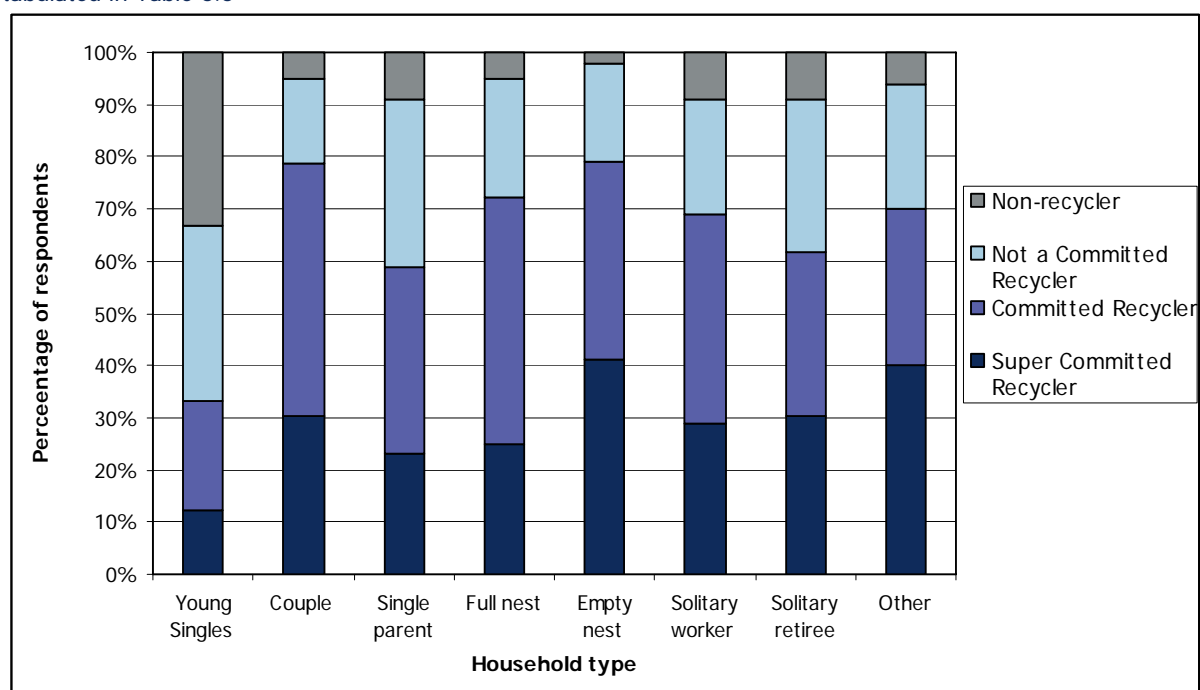
Here and elsewhere in the research we ran analysis to see if commitment to recycling was associated with the varying lifestyle circumstances of households. For this we used a question which classified respondents into one of seven categories related to stages in the typical family 'lifecycle'. While this traditional classification does not encompass all household types, it is a useful descriptor that sums up people's household circumstances. As already seen in the earlier sections of the report detailing the findings of the qualitative component of research, behavioural and attitudinal barriers vary a lot according to people's family circumstances.

The analysis presents a plausible picture of the variation in commitment to recycling according to family lifecycle. One third (33%) of young singles are non recyclers and just 33% are either super-committed/committed to recycling but this should be interpreted with caution due to the low numbers of respondents falling into this category. Parents are the next least committed to recycling at just 59%, while the group 'Empty nest' are the most 'super-committed' to recycling with just over two fifths (41%) categorised this way.

**Table 6.5:** Commitment to recycling grouped by household type, percentages are presented graphically in Figure 6.4

	Young		Couple		Single parent		Full nest	
	Count	%	Count	%	Count	%	Count	%
Super Committed Recycler	5	12%	28	30%	25	23%	130	25%
Committed Recycler	9	21%	45	48%	39	36%	250	48%
Not a Committed Recycler	14	33%	15	16%	35	32%	118	23%
Non-recycler	14	33%	5	5%	10	9%	25	5%
	Empty nest		Solitary		Solitary retiree		Other	
	Count	%	Count	%	Count	%	Count	%
Super Committed Recycler	154	41%	20	29%	63	30%	28	40%
Committed Recycler	144	38%	27	40%	65	31%	21	30%
Not a Committed Recycler	72	19%	15	22%	61	29%	17	24%
Non-recycler	8	2%	6	9%	19	9%	4	6%

**Figure 6.4:** Commitment to recycling grouped by household type, numbers of respondents in each category are tabulated in Table 6.5



## 6.2 Situational barriers

The next four sub-sections of this report apply to those who do recycle at least to some degree (this is 94% of the sample). For this group, which contains super-committed, committed and non-committed recyclers, we have examined situational, behavioural, knowledge and attitudinal barriers in turn.

This sub-section below explores the results from the section of the questionnaire covering situational barriers to recycling.

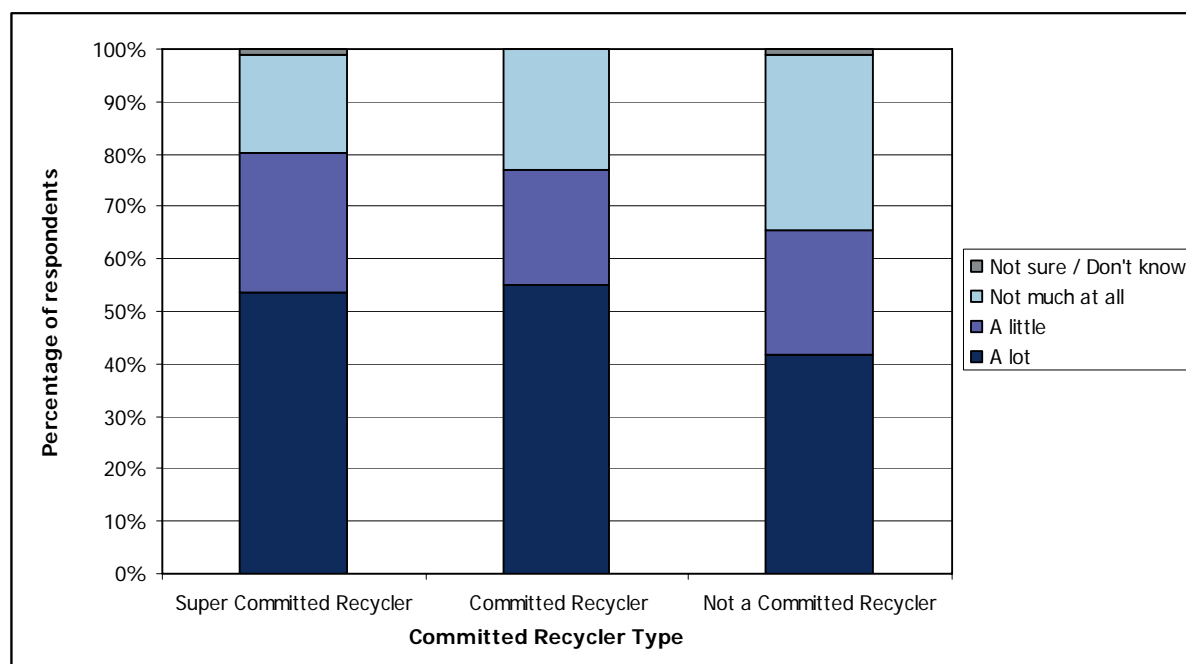
### 6.2.1 Introduction of a collection of a wider range of materials

One important barrier to people recycling more things more often is their claim that not enough recyclable materials are collected at the kerbside. We explored the prevalence of this situational barrier and indeed this is one of the most widely cited barriers. Respondents were asked how much difference it would make to the amount they recycled, if they had kerbside collection of a wider range of materials. Overall, three quarters (75%) stated that more materials collected at the kerbside would make a lot/a little difference to the amount they recycle. This is one of the biggest barriers we identified to recycling for a very large proportion of the public. The proportion of super-committed recyclers stating that it would help them recycle more was 80% in contrast to just 66% of non-committed recyclers. This is interesting as it suggests super-committed recyclers are still not recycling as much as they would like, though this may be because materials they would like to avoid sending to landfill are not yet widely reprocessed.

**Table 6.6:** Respondents reporting how much difference it would make to the amount they recycle, if more materials were collected at the kerbside, grouped by their commitment to recycling. Percentages are presented graphically in Figure 6.5

	Super Committed		Committed		Not a Committed		Total	
	Count	%	Count	%	Count	%	Count	%
A lot	244	54%	334	55%	146	42%	728	51%
A little	122	27%	134	22%	84	24%	344	24%
Not much at all	84	19%	140	23%	118	34%	345	24%
Not sure / Don't know	3	1%	2	0%	2	1%	7	1%

**Figure 6.5:** Respondents reporting how much difference it would make to the amount they recycle, if more materials were collected at the kerbside, grouped by their commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.6



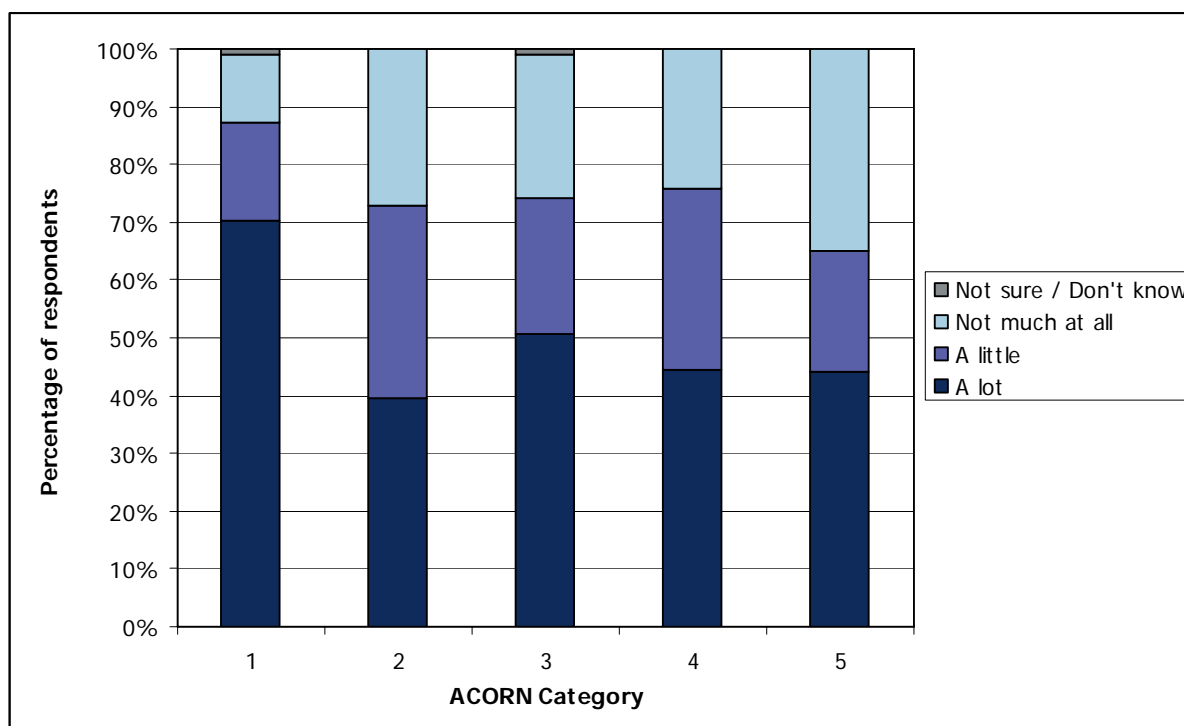
### 6.2.2 Introduction of a collection of a wider range of materials, analysed by ACORN

When broken down by ACORN the majority of respondents (88%) within category 1 stated that a wider range of materials would enable them to recycle 'a lot' or 'a little' more. In addition 35% of ACORN 5 respondents stated that it would not make a difference. ACORN 5 are the least affluent households and often the least active recyclers, although they also tend to have the least amount of waste that could be described as potentially recyclable through dry recyclable collections (M·E·L Research 2008). These characteristics are opposite to those of an ACORN 1.

**Table 6.7:** Respondents reporting how much difference it would make to the amount they recycle if a wider range of materials were collected kerbside, grouped by ACORN. Percentages are presented graphically in Figure 6.6

	ACORN										Total	
	1		2		3		4		5			
A lot	196	71%	33	39%	262	51%	105	44%	115	44%	711	52%
A little	47	17%	28	33%	124	24%	74	31%	56	21%	329	24%
Not much at all	32	12%	23	27%	127	25%	58	24%	92	35%	332	24%
Not sure / Don't know	2	1%	0	0%	3	1%	1	0%	1	0%	7	1%

**Figure 6.6:** Respondents reporting how much difference it would make to the amount they recycle if a wider range of materials were collected kerbside, grouped by ACORN. Numbers of respondents in each category are tabulated in Table 6.7



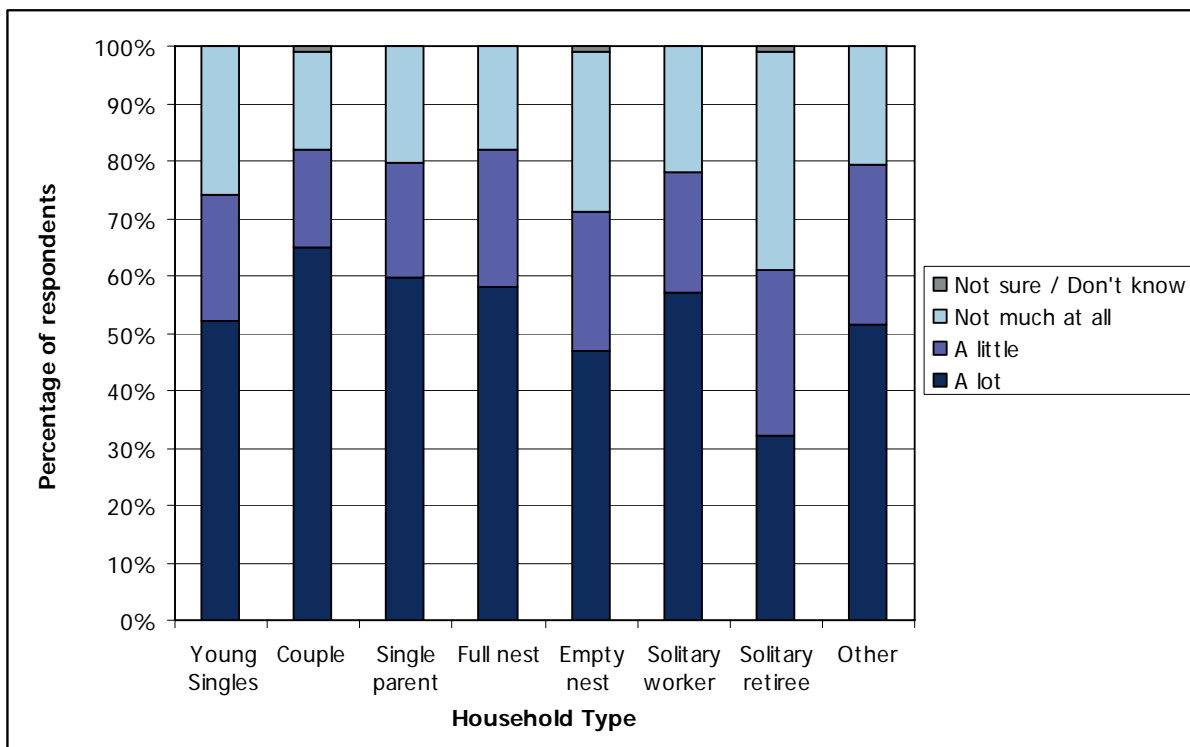
### 6.2.3 Introduction of collection of a wider range of materials, analysed by family lifecycle

Two thirds of couples with no children (66%) stated that if they had a wider range of materials collected they would recycle a lot more. Also 60% of single parents also stated that they would recycle more if they had a wider range of materials collected. In contrast just 32% of solitary retirees stated it would help a lot and this may be because they go to bring banks and HWRCs to recycle the materials that are not collected.

**Table 6.8:** Respondents reporting how much difference it would make to the amount they recycle if a wider range of materials were collected kerbside, grouped by household type. Percentages are presented graphically in Figure 6.7

	Young Singles		Couple		Single parent		Full nest	
	Count	%	Count	%	Count	%	Count	%
A lot	14	52%	57	65%	58	59%	289	58%
A little	6	22%	15	17%	20	20%	120	24%
Not much at all	7	26%	15	17%	20	20%	92	18%
Not sure / Don't know	0	0%	1	1%	0	0%	1	0%
	Empty nest		Solitary worker		Solitary retiree		Other	
	Count	%	Count	%	Count	%	Count	%
A lot	173	47%	36	57%	61	32%	35	52%
A little	90	24%	13	21%	55	29%	19	28%
Not much at all	104	28%	14	22%	72	38%	14	21%
Not sure / Don't know	4	1%	0	0%	1	1%	0	0%

**Figure 6.7:** Respondents reporting how much difference it would make to the amount they recycle if a wider range of materials were collected kerbside, grouped by household type. Numbers of respondents in each category are tabulated in Table 6.8



### 6.2.4 Frequency of the kerbside collection service as a barrier to recycling

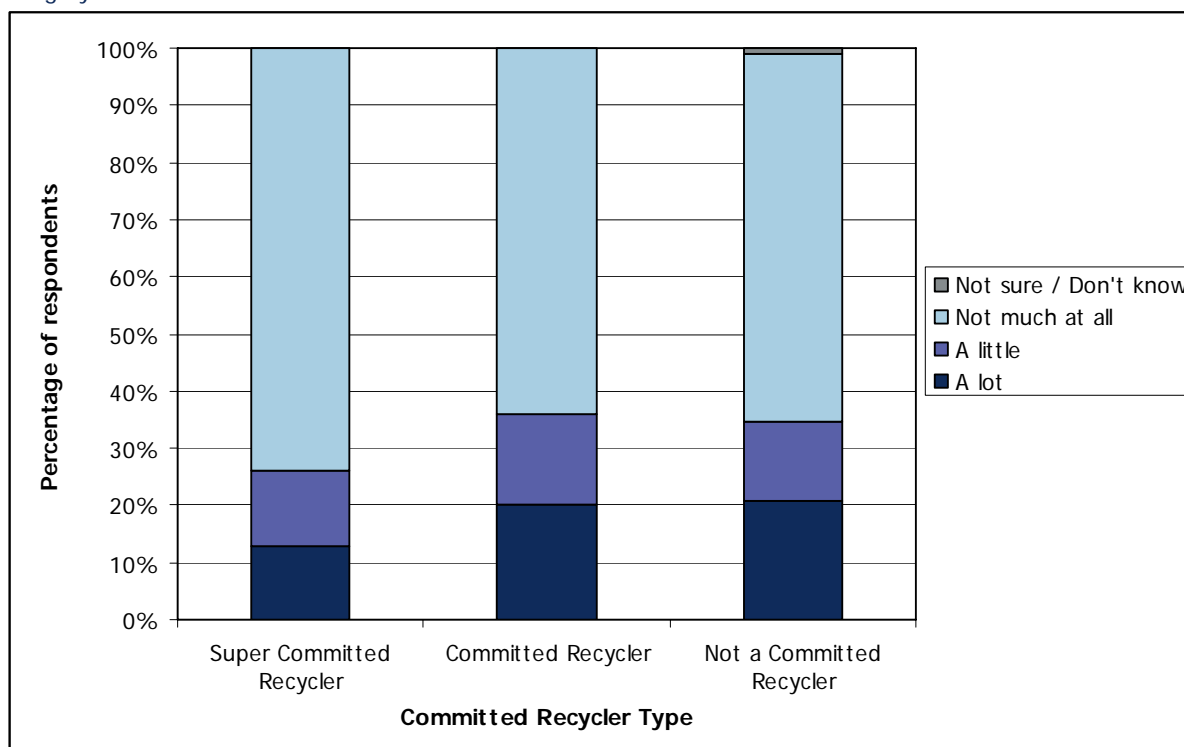
Respondents were asked if having a more frequent collection service would make it easier for them to recycle more things more often. Overall two thirds of respondents (67%) stated that it would not make much difference at all. When analysed according to people's commitment to recycling there are interesting results.

The super-committed recyclers are the least likely to recycle more if collections were more frequent (in contrast to the previous analysis where they were the most likely to recycle more if more materials were collected). Thus, frequency of collection is not so much a barrier for this group as the extent of materials collected. By contrast, rather more of the non-committed recyclers said more frequent collections would make a difference.

**Table 6.9:** Respondents reporting how much difference it would make to the amount they recycle, if their kerbside collection was more frequent, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.8

	Super Committed Recycler		Committed Recycler		Not a Committed Recycler		Total	
	Count	%	Count	%	Count	%	Count	%
A lot	57	13%	123	20%	73	21%	255	18%
A little	59	13%	98	16%	48	14%	207	15%
Not much at all	336	74%	390	64%	227	65%	960	67%
Not sure / Don't know	0	0%	1	0%	2	1%	3	0%
Total	452	100%	612	100%	350	100%	1425	100%

**Figure 6.8:** Respondents reporting how much difference it would make to the amount they recycle if their kerbside collection was more frequent, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.9



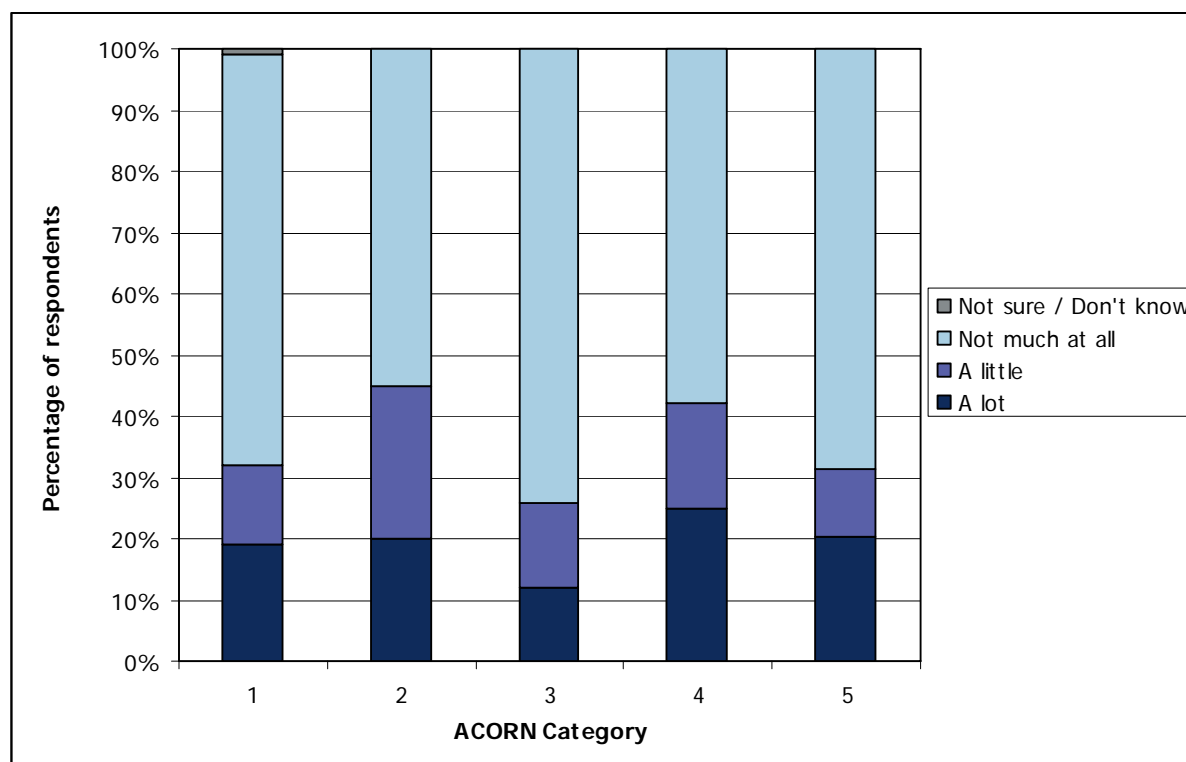
### 6.2.5 ACORN and frequency of the kerbside collection service

When cross tabulated with ACORN 45% of category 2 stated that more frequent collection would make them more likely to recycle. It can be seen that in ACORN 4, more frequent collection would make a lot of difference to a quarter of the respondents, in contrast to ACORN 3 where the figure is only 12%.

**Table 6.10:** Respondents reporting how much difference it would make to the amount they recycle if their kerbside collection was more frequent, grouped by ACORN. Percentages are presented graphically in Figure 6.9

	ACORN											
	1		2		3		4		5		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
A lot	52	19%	17	20%	64	12%	60	25%	54	20%	247	18%
A little	36	13%	21	25%	73	14%	41	17%	30	11%	201	15%
Not much at all	186	67%	46	55%	380	74%	137	58%	180	68%	929	67%
Not sure / Don't know	2	1%	0	0%	0	0%	0	0%	1	0%	3	0%

**Figure 6.9:** Respondents reporting how much difference it would make to the amount they recycle if their kerbside collection was more frequent, grouped by ACORN. Numbers of respondents in each category are tabulated in Table 6.10.



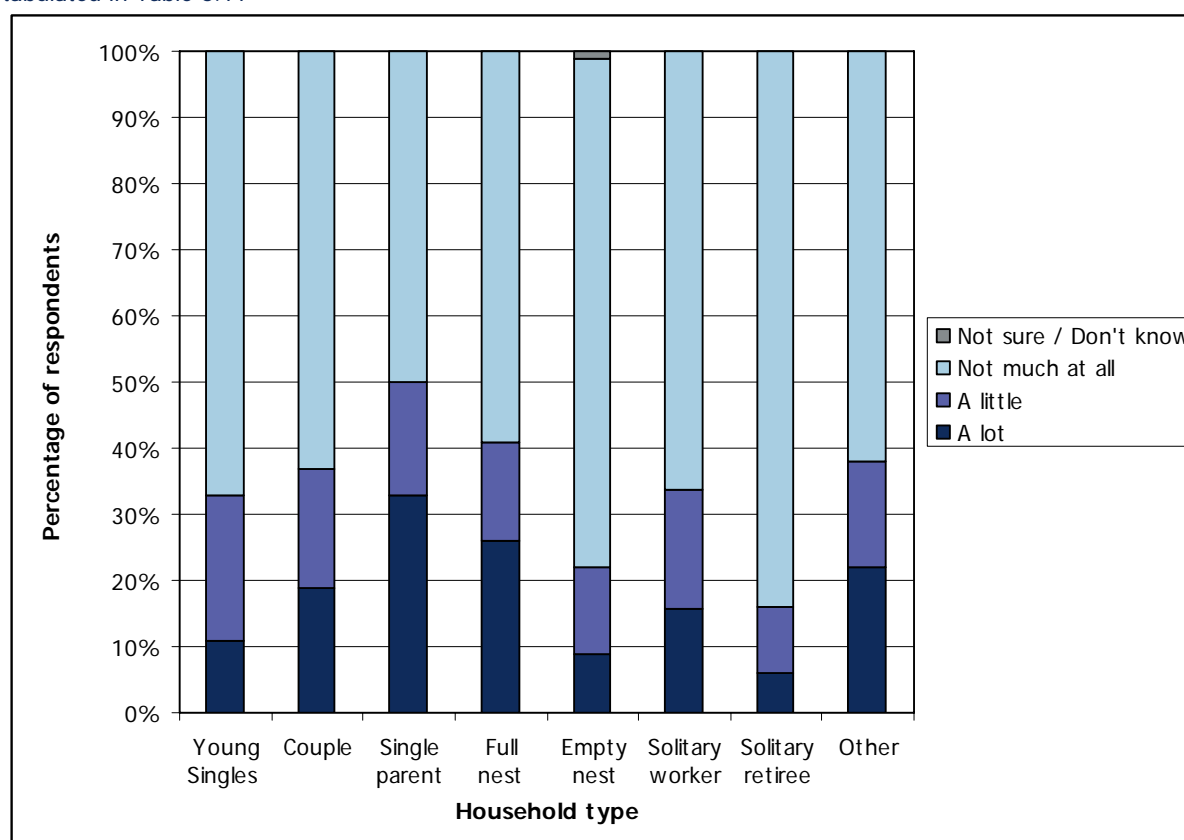
## 6.2.6 Frequency of the kerbside collection service and family lifecycle

Just over half of single parents (51%) stated that a more frequent collection would get them to recycle more. For this group the result matches that from the previous section where a large percentage stated that if they had a more materials collected they would recycle more. When looking specifically at the respondents who said more frequent collections would make a 'lot' of difference, this peaks in the single parent, full nest and couple together groups, but has least effect for young singles, empty nesters and solitary retirees.

**Table 6.11:** Respondents reporting how much difference it would make to the amount they recycle if their kerbside collection was more frequent, grouped by household type. Percentages are presented graphically in Figure 6.10

	Young Singles		Couple		Single parent		Full nest	
	Count	%	Count	%	Count	%	Count	%
A lot	3	11%	17	19%	33	33%	129	26%
A little	6	22%	16	18%	17	17%	75	15%
Not much at all	18	67%	55	63%	49	50%	296	59%
Not sure / Don't know	0	0%	0	0%	0	0%	1	0%
	Empty nest		Solitary worker		Solitary retiree		Other	
	Count	%	Count	%	Count	%	Count	%
A lot	34	9%	10	16%	12	6%	15	22%
A little	50	13%	11	18%	19	10%	11	16%
Not much at all	286	77%	42	67%	158	84%	42	62%
Not sure / Don't know	2	1%	0	0%	0	0%	0	0%

**Figure 6.10:** Respondents reporting how much difference it would make to the amount they recycle if their kerbside collection was more frequent, grouped by household type. Numbers of respondents in each category are tabulated in Table 6.11



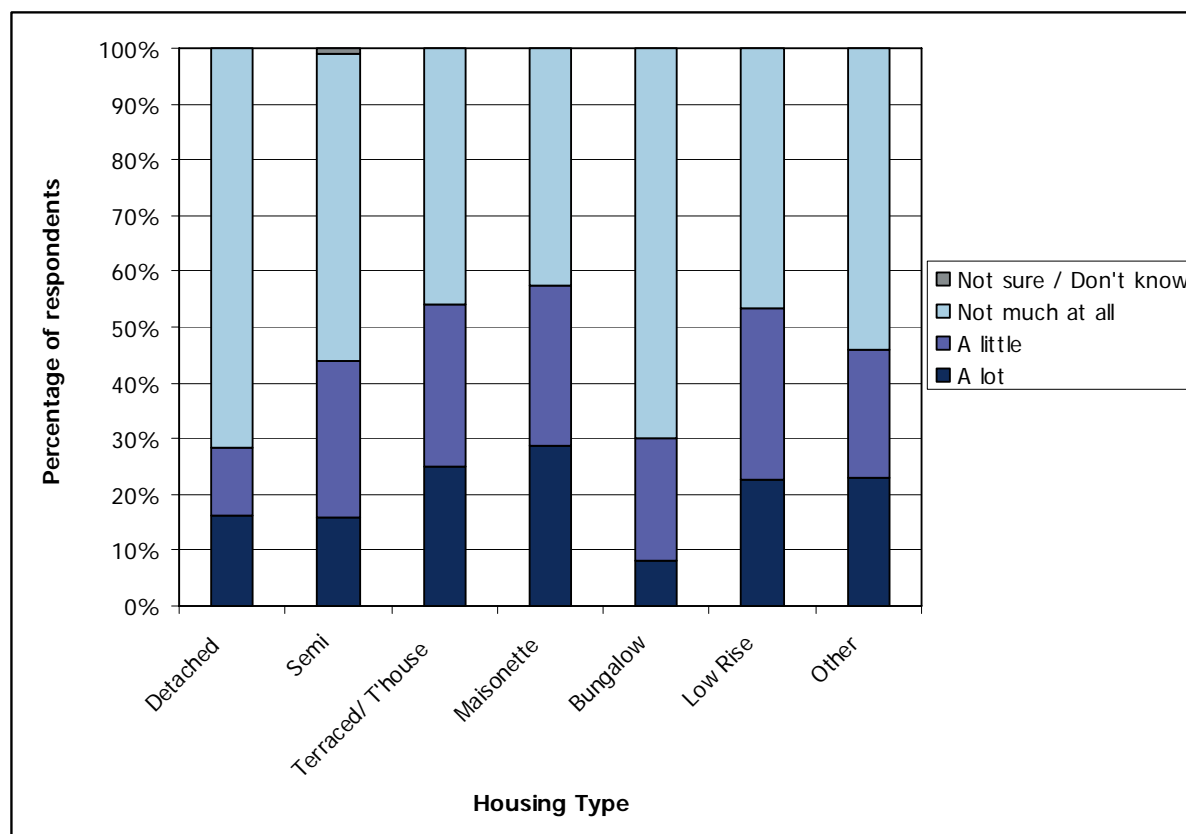
### 6.2.7 The amount people recycle and space in the house to store recycling containers

Respondents were asked how much difference it would make to the amount of recycling they do if there was more space around the house to store the recycling containers. Those who live in detached/semi detached households were less likely to say it made a difference to respondents that live in terraced properties. Similar findings have been reported by Tucker *et al.*, (1997), and McDonald and Oates (2003). This barrier is one that is difficult to overcome but one way to solve it may be to introduce localised bring sites to areas of housing where there is limited space.

**Table 6.12:** Respondents reporting how much difference it would make to the amount they recycle if they had more space to store recycling containers, grouped by housing type. Percentages are presented graphically in Figure 6.11

	Detached		Semi		Terraced/ T'house		Maisonette	
	Count	%	Count	%	Count	%	Count	%
A lot	44	16%	80	16%	110	25%	6	29%
A little	33	12%	144	28%	130	29%	6	29%
Not much at all	194	71%	282	55%	206	46%	9	43%
Not sure / Don't know	1	0%	6	1%	1	0%	0	0%
	Bungalow		Low Rise		High Rise		Other	
	Count	%	Count	%	Count	%	Count	%
A lot	7	8%	14	23%	0	0%	3	23%
A little	20	22%	19	31%	1	100%	3	23%
Not much at all	63	70%	29	47%	0	0%	7	54%
Not sure / Don't know	0	0%	0	0%	0	0%	0	0%

**Figure 6.11:** Respondents reporting how much difference it would make to the amount they recycle if they had more space to store recycling containers, grouped by housing type. Numbers of respondents in each category are tabulated in Table 6.12



### 6.3 Behavioural barriers

Moving from the discussion of situational barriers, the next sub-section presents the findings from the analysis of key behavioural barriers to recycling.

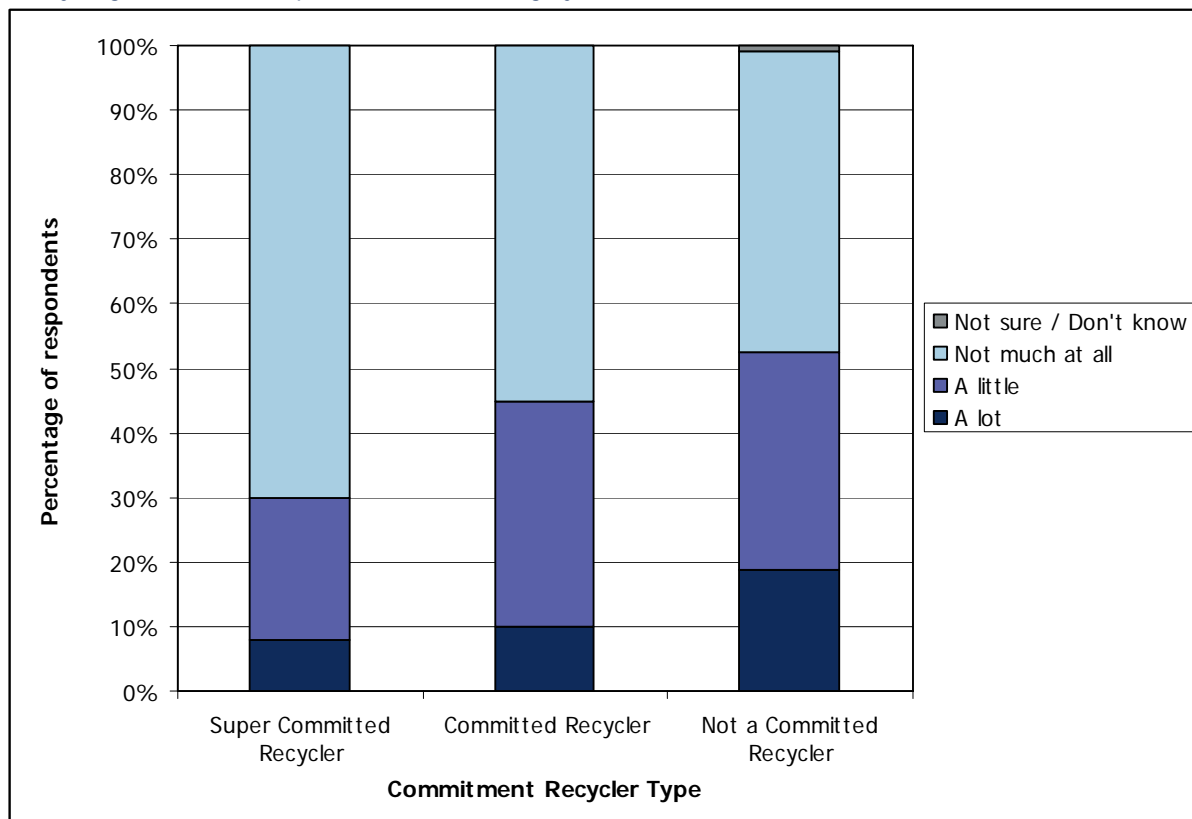
#### 6.3.1 Commitment to recycling and having to store recyclables until collection day

Respondents were asked if they are put off recycling because they have to store materials until they are collected and overall 43% stated they were a little/a lot. However, less super-committed recyclers are put off compared to committed and not committed recyclers.

**Table 6.13:** Respondents reporting how put off they are by having to store recyclables, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.12

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
A lot	36	8%	64	10%	65	19%	165	12%
A little	99	22%	213	35%	119	34%	431	31%
Not much at all	315	70%	333	55%	162	47%	810	57%
Not sure / Don't know	0	0%	1	0%	2	1%	3	0%
Total	450	100%	611	100%	348	100%	1409	100%

**Figure 6.12:** Respondents reporting how put off they are by having to store recyclables, grouped by commitment to recycling, numbers of respondents in each category are tabulated in Table 6.13



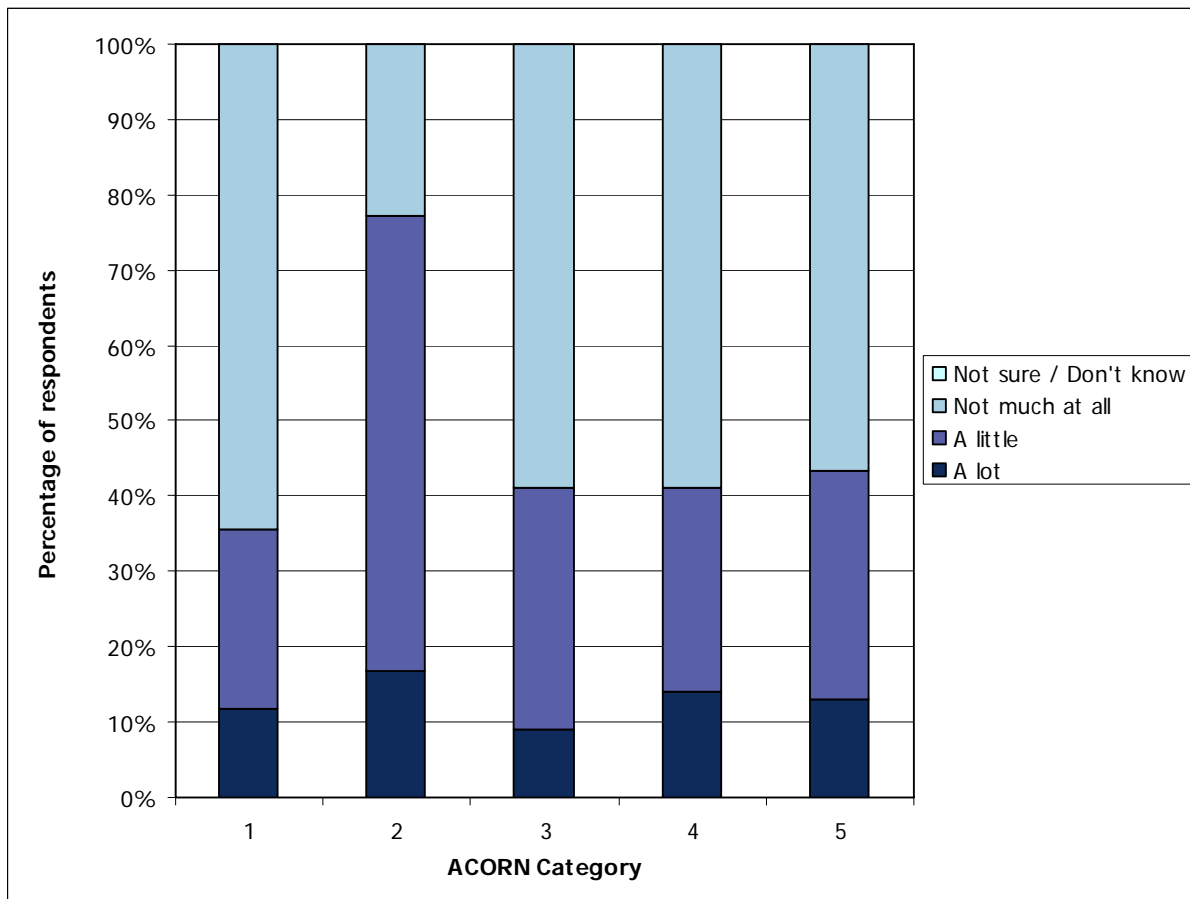
### 6.3.2 ACORN and problems with having to store recyclables until collection day

Respondents that are ACORN 2 category are more likely to state that having to store materials is a barrier to recycling than the other categories.

**Table 6.14:** Respondents reporting how put off they are by having to store recyclables, grouped by ACORN category. Percentages are presented graphically in Figure 6.13

	ACORN											
	1		2		3		4		5		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
A lot	32	12%	14	17%	47	9%	33	14%	35	13%	161	12%
A little	65	24%	51	61%	164	32%	64	27%	80	30%	424	31%
Not much at all	180	65%	19	23%	302	59%	140	59%	148	56%	789	57%
Not sure / Don't know	0	0%	0	0%	1	0%	1	0%	1	0%	3	0%

**Figure 6.13:** Respondents reporting how put off they are by having to store recyclables, grouped by ACORN category. Numbers of respondents in each category are tabulated in Table 6.14

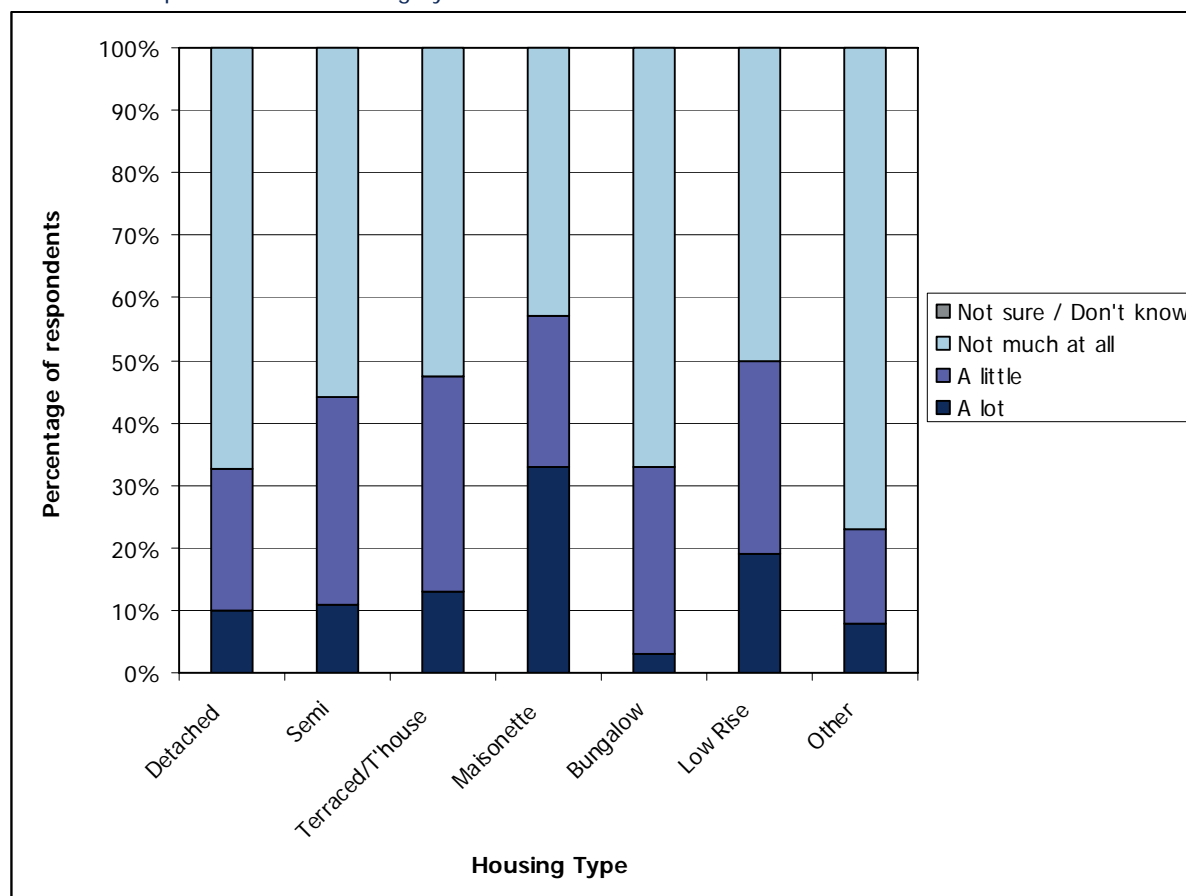


When broken down by property type, those that live in maisonettes have the most difficulty in waiting until collection day; however, caution should be taken with the limited numbers of respondents involved. Respondents in detached houses have the least issues in waiting for collections possibly due to having more room to store recyclables.

**Table 6.15:** Respondents reporting how put off they are by having to store recyclables, grouped by housing type. Percentages are presented graphically in Figure 6.14

	Detached		Semi		Terraced or T'house		Maisonette	
	Count	%	Count	%	Count	%	Count	%
A lot	26	10%	56	11%	60	13%	7	33%
A little	61	23%	169	33%	152	34%	5	24%
Not much at all	184	68%	287	56%	234	52%	9	43%
Not sure / Don't know	0	0%	1	0%	2	0%	0	0%
Total	271	100%	513	100%	448	100%	21	100%
	Bungalow		Low Rise		High Rise		Other	
	Count	%	Count	%	Count	%	Count	%
A lot	3	3%	12	19%	1	100%	1	8%
A little	27	30%	19	31%	0	0%	2	15%
Not much at all	61	67%	31	50%	0	0%	10	77%
Not sure / Don't know	0	0%	0	0%	0	0%	0	0%
Total	91	100%	62	100%	1	100%	13	100%

**Figure 6.14:** Respondents reporting how put off they are by having to store recyclables, grouped by housing type. Numbers of respondents in each category are tabulated in Table 6.15



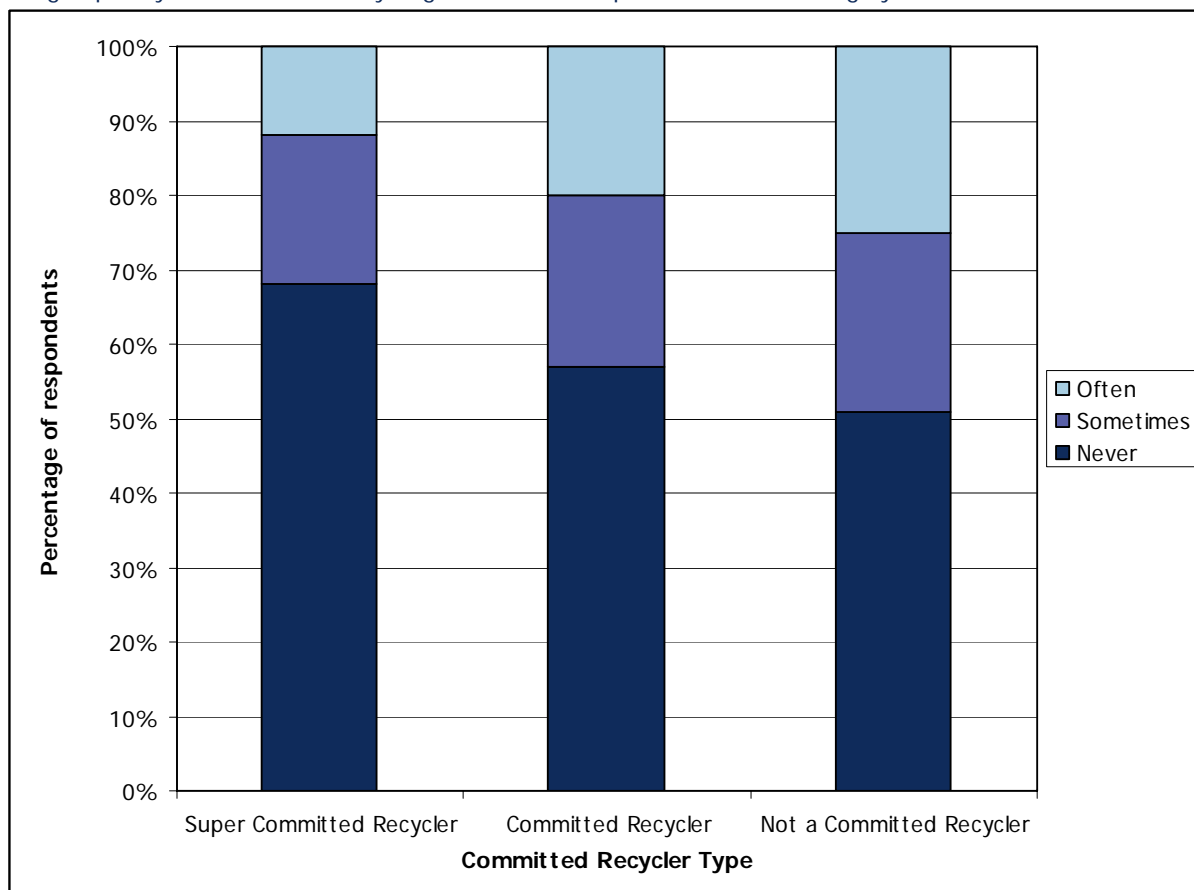
### 6.3.3 Disposal of Recyclables from the bathroom into the normal bin

We looked at a range of other possible behavioural barriers within the household, one of which was the practical difficulties of recycling items of waste that people generate in the bathroom (soap, toothpaste and shampoo packaging for example). Overall 41% of recyclers stated that they sometimes or often throw recyclables from the bathroom into the normal residual bin. When broken into commitment to recycling more super-committed recyclers (68%) said they never put recyclables in the normal bin than those who are not committed, as one might expect. However, with one third of the super-committed recyclers still stating they put recyclables from the bathroom in the normal bin it clear that is a barrier that can be addressed through a more tailored communication campaign.

**Table 6.16:** Respondents reporting how often they dispose of recyclables from the bathroom into the normal bin, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.15

	Super Committed		Committed Recycler		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Never	307	68%	347	57%	180	51%	834	59%
Sometimes	90	20%	141	23%	84	24%	315	22%
Often	56	12%	122	20%	86	25%	264	19%
Total	453	100%	610	100%	350	100%	1413	100%

**Figure 6.15:** Respondents reporting how often they dispose of recyclables from the bathroom into the normal bin, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.16

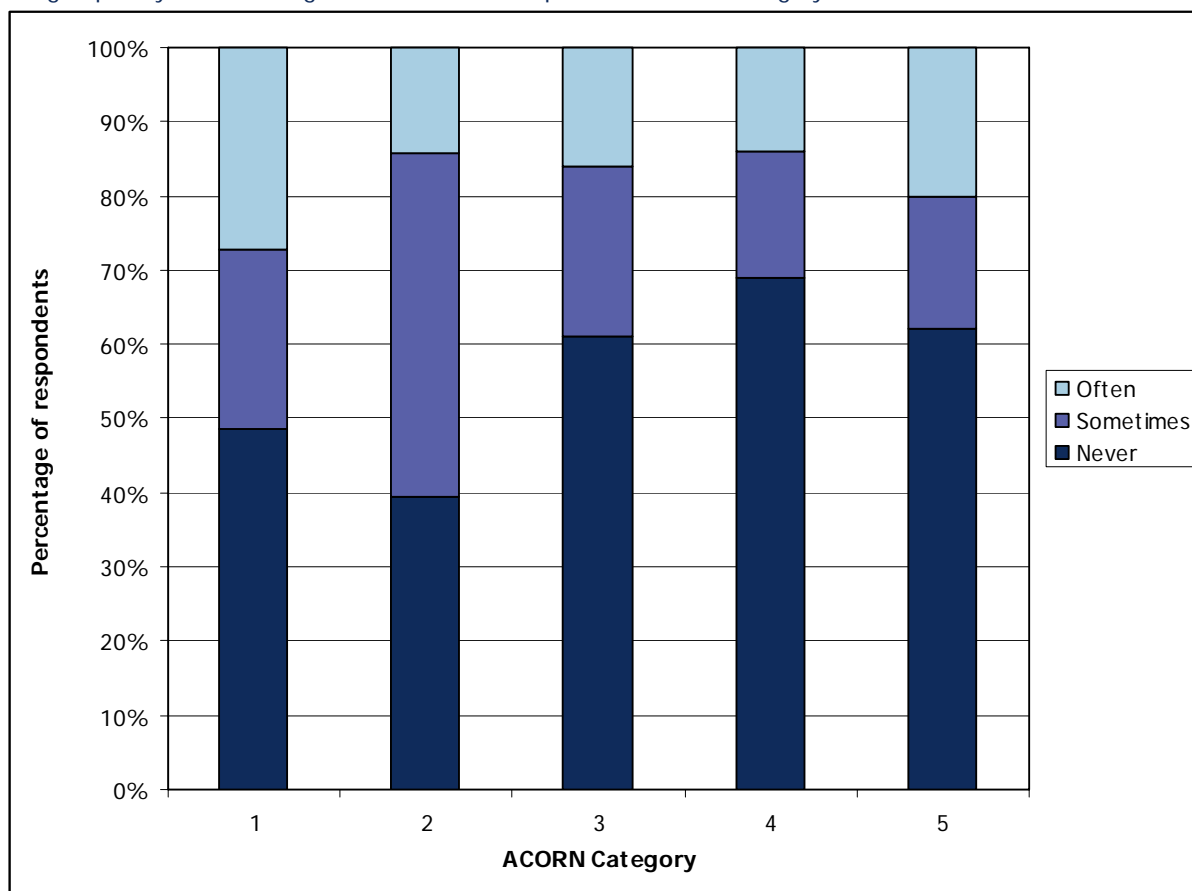


It is clear that this barrier needs to be explored in more detail and from ACORN categories it is evident that ACORN 2 households are more likely to dispose of bathroom recyclables into the normal bin than rather recycling them

**Table 6.17:** Respondents reporting how often they dispose of recyclables from the bathroom into the normal bin, grouped by ACORN categories. Percentages are presented graphically in Figure 6.16

	ACORN											
	1		2		3		4		5		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Never	134	48%	33	39%	315	61%	163	69%	166	62%	811	59%
Sometimes	67	24%	39	46%	118	23%	41	17%	47	18%	312	23%
Often	76	27%	12	14%	84	16%	33	14%	53	20%	258	19%

**Figure 6.16:** Respondents reporting how often they dispose of recyclables from the bathroom into the normal bin, grouped by ACORN categories. Numbers of respondents in each category are tabulated in Table 6.17

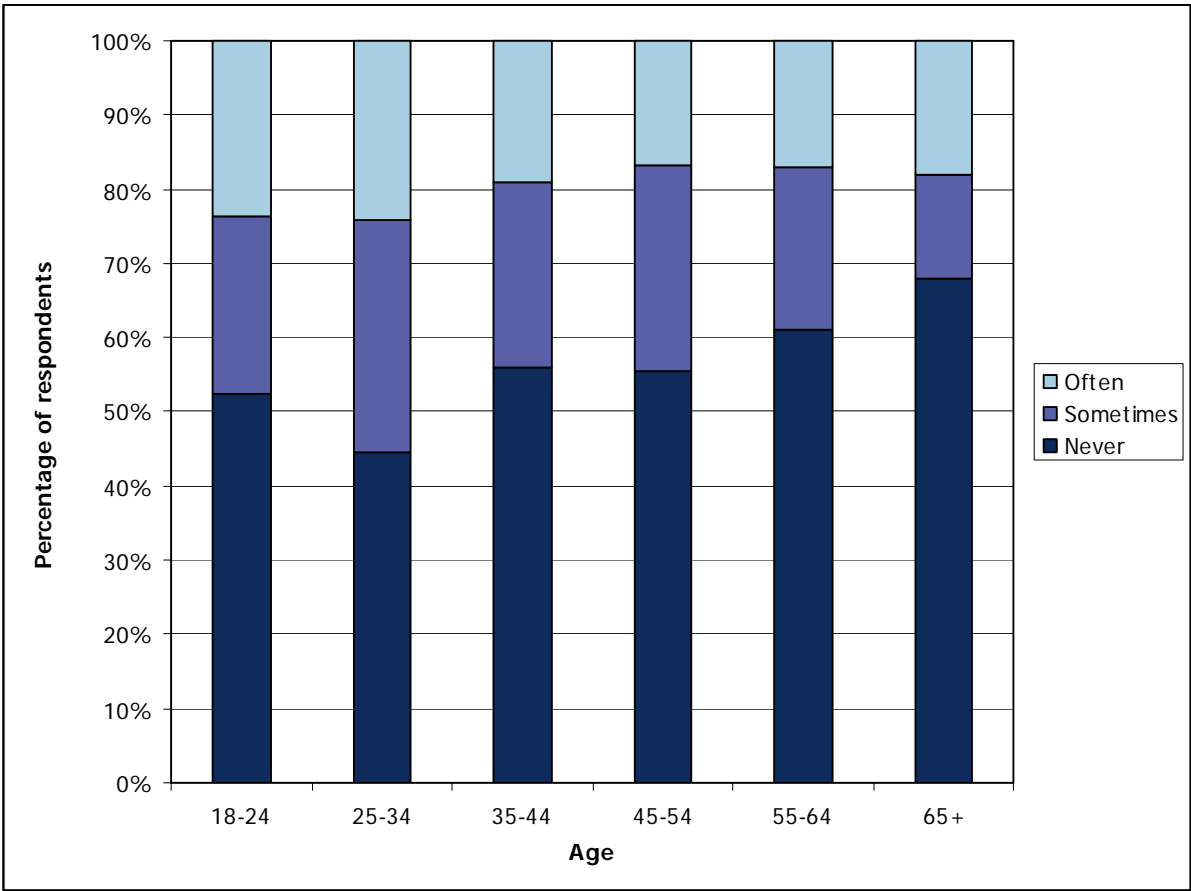


Over half (55%) of the 25-34 age group stated that they dispose of the bathroom recyclables in the normal bin, just less than half of 18-24 group stated the same. Figure 6.18 shows that as age increases there is fewer disposals of recyclables in the normal bin. Again this behaviour could be linked to the younger age groups being too busy to take the time to separate their bathroom waste.

**Table 6.18:** Respondents reporting how often they dispose of recyclables from the bathroom into the normal bin, grouped by age. Percentages are presented graphically in Figure 6.17

	18-24		25-34		35-44		45-54		55-64		65+	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Never	27	53%	75	44%	159	56%	141	56%	138	61%	295	68%
Sometimes	12	24%	53	31%	72	25%	70	28%	49	22%	62	14%
Often	12	24%	41	24%	55	19%	43	17%	38	17%	76	18%

**Figure 6.17:** Respondents reporting how often they dispose of recyclables from the bathroom into the normal bin, grouped by age. Numbers of respondents in each category are tabulated in Table 6.18



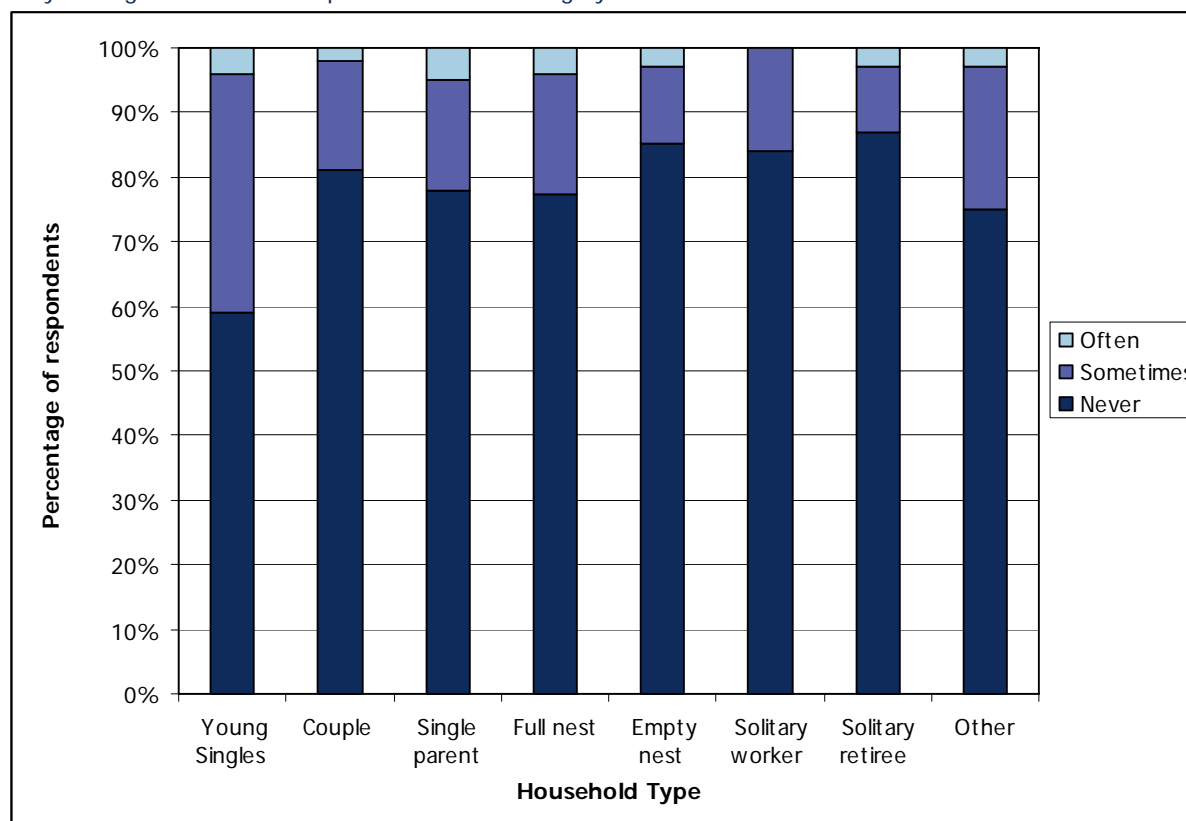
### 6.3.4 Disposing of dirty recyclable materials in the normal bin

Another possible behavioural barrier is the requirement to clean dirty recyclables before putting them in the recycling container. The majority of respondents claimed that they never threw dirty recyclables into the residual bin because they did want to clean them out but for a fifth, on average, this was a practical behavioural barrier to recycling as much as they could. When broken down into family lifecycle, young singles are more likely to dispose of them straight into the bin than the other types.

**Table 6.19:** Respondents reporting how often they dispose of dirty recyclables into the normal bin, grouped by lifecycle stage. Percentages are presented graphically in Figure 6.18

	Young Singles		Couple		Single parent		Full nest	
	Count	%	Count	%	Count	%	Count	%
Never	16	59%	71	81%	77	78%	389	78%
Sometimes	10	37%	15	17%	17	17%	95	19%
Often	1	4%	2	2%	5	5%	18	4%
	Empty nest		Solitary worker		Solitary retiree		Other	
	Count	%	Count	%	Count	%	Count	%
Never	319	86%	53	84%	164	87%	51	75%
Sometimes	43	12%	10	16%	19	10%	15	22%
Often	10	3%	0	0%	5	3%	2	3%

**Figure 6.18:** Respondents reporting how often they dispose of dirty recyclables into the normal bin, grouped by lifecycle stage. Numbers of respondents in each category are tabulated in Table 6.19



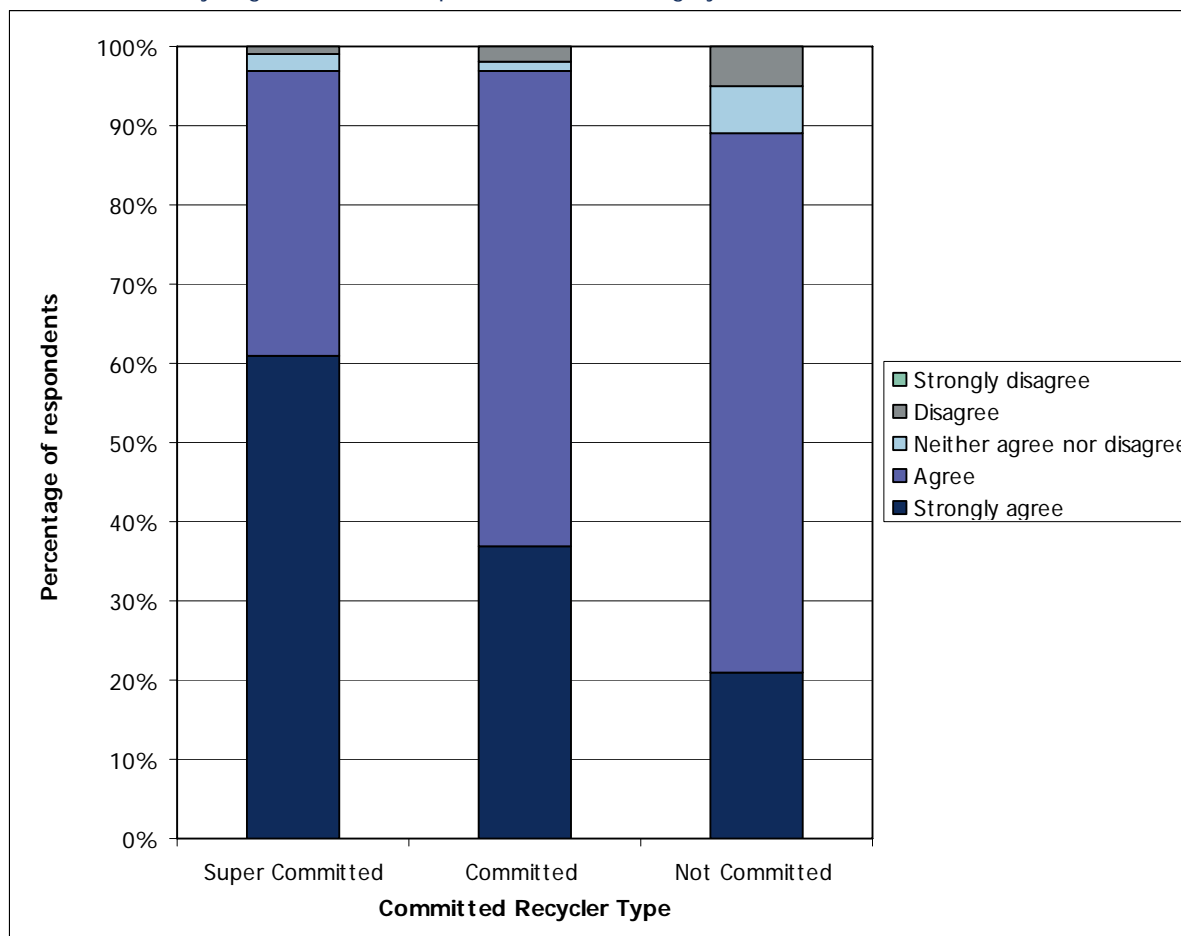
### 6.3.5 Regular household routine and recycling

Both the overview of the literature and the in-depth research suggested that recycling competence is strongly linked to the existence within the household of a disciplined domestic routine. Absence of such a routine is likely to pose a significant barrier to effective recycling and we tested in the survey whether householders felt this was so. Respondents were asked if they agreed that recycling is now part of their regular household routine and the results clearly indicate that super-committed recyclers agreed with this statement. The majority of non committed recyclers (89%) also strongly agreed/agreed with the statement, but with 68% agreeing compared to 36% of super-committed who agreed.

**Table 6.20:** Respondents agreeing that recycling is part of their regular household routine, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.19

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Strongly agree	275	61%	224	37%	74	21%	580	41%
Agree	164	36%	365	60%	236	68%	769	54%
Neither agree nor disagree	7	2%	9	1%	20	6%	36	3%
Disagree	4	1%	11	2%	18	5%	33	2%
Strongly disagree	1	0%	2	0%	1	0%	5	0%
Total	451	100%	611	100%	349	100%	1423	100%

**Figure 6.19:** Respondents agreeing that recycling is part of their regular household routine, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.20



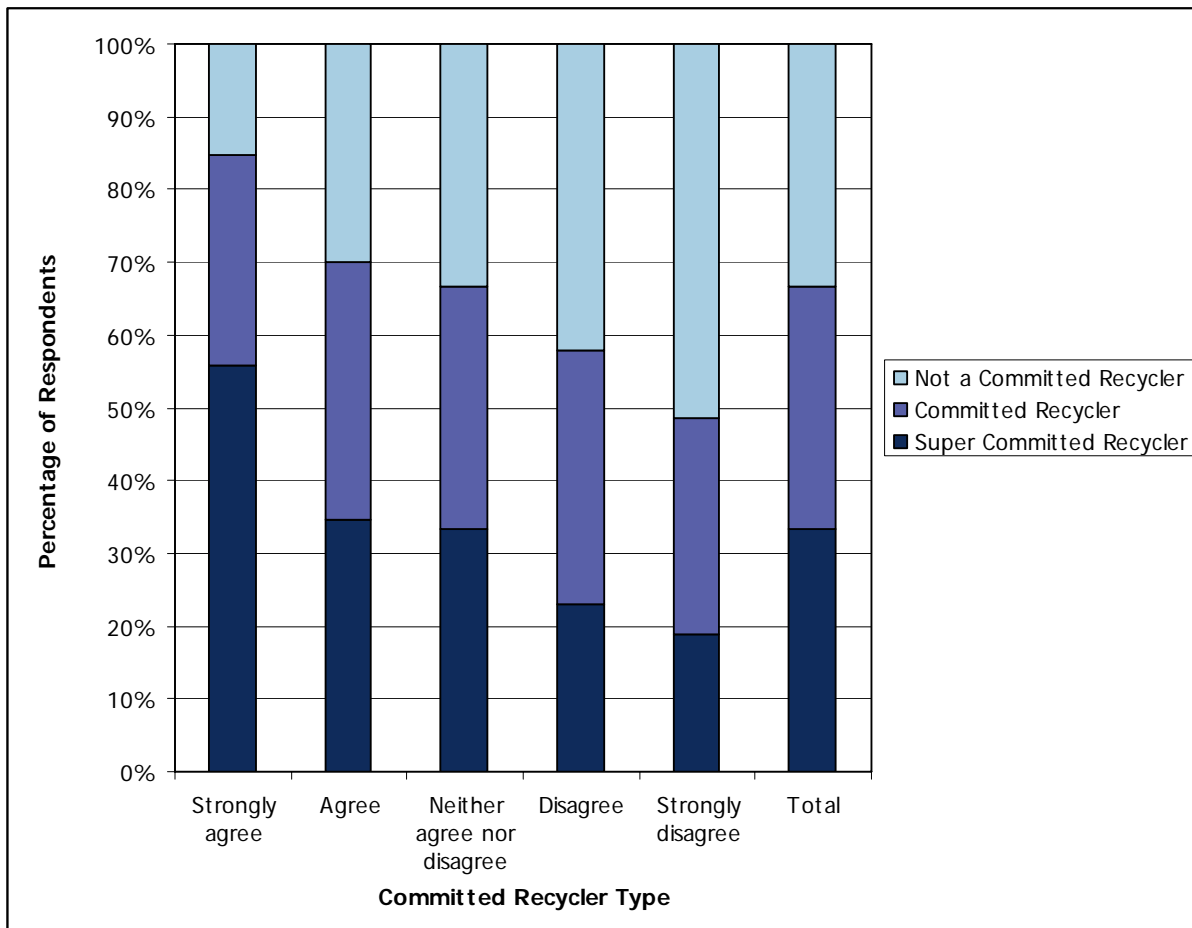
### 6.3.6 Other recycling facilities

Respondents were asked if they used any other facilities to recycle and the majority (70%) of super-committed recyclers stated that they use bring banks/council sites. Just 42% of non committed recyclers stated they used the other services available.

**Table 6.21:** Respondents agreeing that using bring sites is part of their normal household routine, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.20

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Strongly agree	148	33%	105	17%	31	9%	284	20%
Agree	170	38%	235	39%	114	33%	519	37%
Neither agree nor disagree	16	4%	27	4%	14	4%	57	4%
Disagree	85	19%	174	29%	123	35%	382	27%
Strongly disagree	33	7%	67	11%	67	19%	167	12%
Total	452	100%	608	100%	349	100%	1409	100%

**Figure 6.20:** Respondents agreeing that using bring sites is part of their normal household routine, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.21



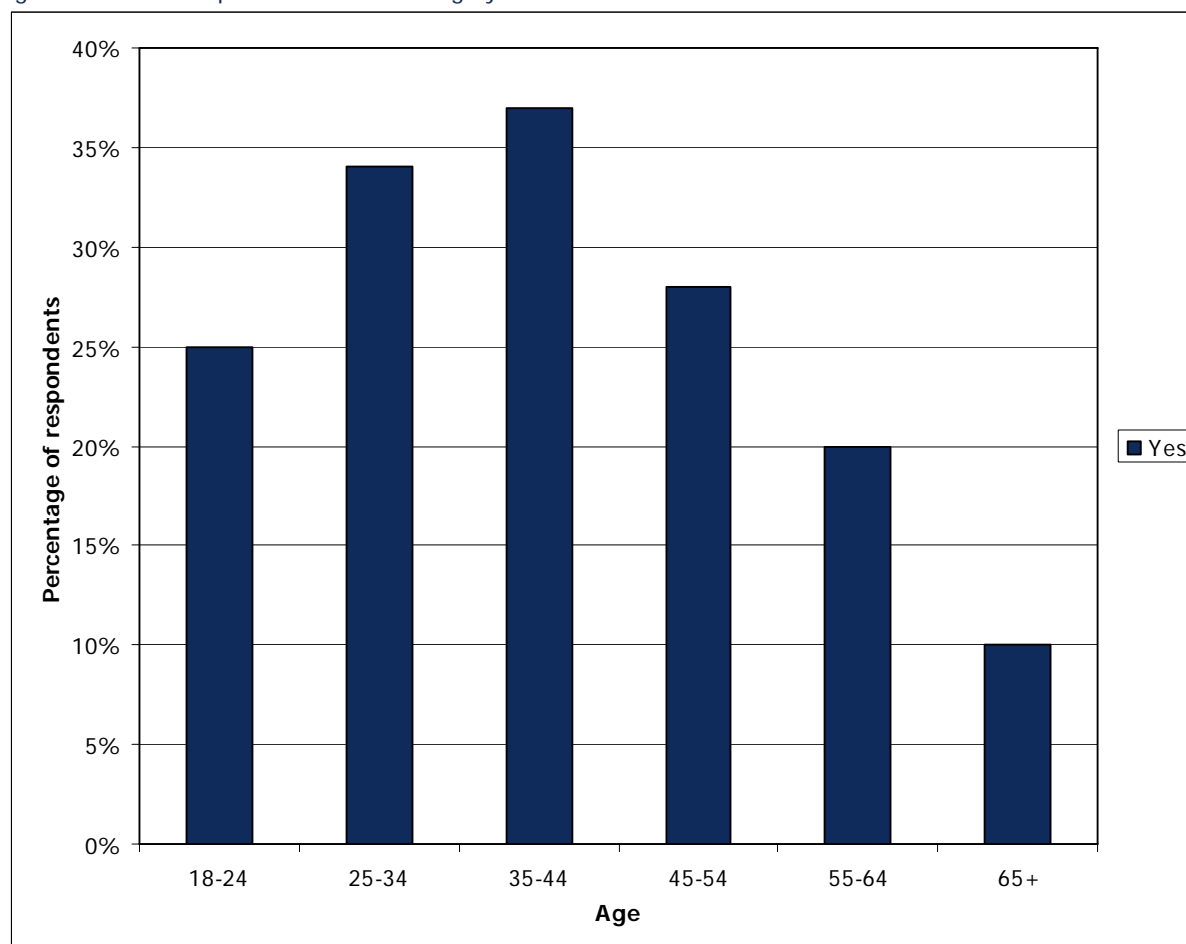
### 6.3.7 Barriers to recycling at Christmas

Respondents were asked if there are any times of the year when they find it harder than usual to recycle as much as they would like and over one third of 25-34 and 35-44 age groups stated during the Christmas period. Less elderly respondents found it an issue.

**Table 6.22:** Respondents saying whether or not it was harder than usual to recycle at Christmas, grouped by age. Percentages are presented graphically in Figure 6.21

	18-24		25-34		35-44		45-54		55-64		65+	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Yes	16	25%	64	34%	109	37%	76	28%	46	20%	47	10%
No	48	75%	124	66%	188	63%	193	72%	187	80%	404	90%
Total	64	100%	188	100%	297	100%	269	100%	233	100%	451	100%

**Figure 6.21:** Respondents saying whether or not it was harder than usual to recycle at Christmas, grouped by age. Numbers of respondents in each category are tabulated in Table 6.22

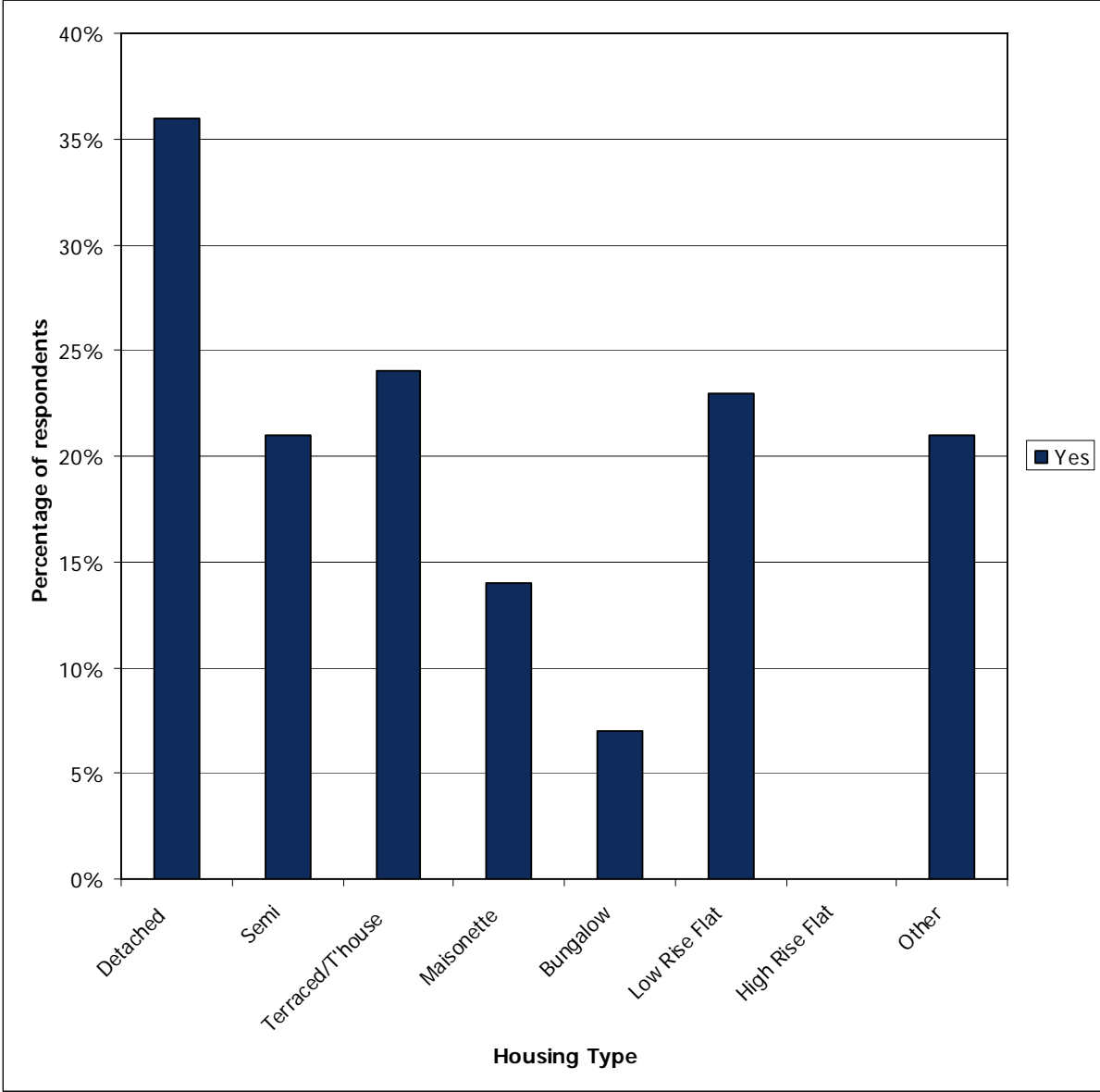


When broken down by property type 36% of respondents living in detached households stated that during Christmas recycling is harder.

**Table 6.23:** Respondents saying whether or not it was harder than usual to recycle at Christmas, grouped by housing type. Percentages are presented graphically in Figure 6.22

	Detached		Semi		Terraced/T'house		Maisonette	
	Count	%	Count	%	Count	%	Count	%
Yes	99	36%	111	21%	116	24%	3	14%
No	178	64%	422	79%	369	76%	19	86%
Total	277	100%	533	100%	485	100%	22	100%
	Bungalow		Low Rise Flat		High Rise Flat		Other	
	Count	%	Count	%	Count	%	Count	%
Yes	7	7%	19	23%	0	0%	3	21%
No	87	93%	63	77%	1	100%	11	79%
Total	94	100%	82	100%	1	100%	14	100%

**Figure 6.22:** Respondents saying whether or not it was harder than usual to recycle at Christmas, grouped by housing type. Numbers of respondents in each category are tabulated in Table 6.23

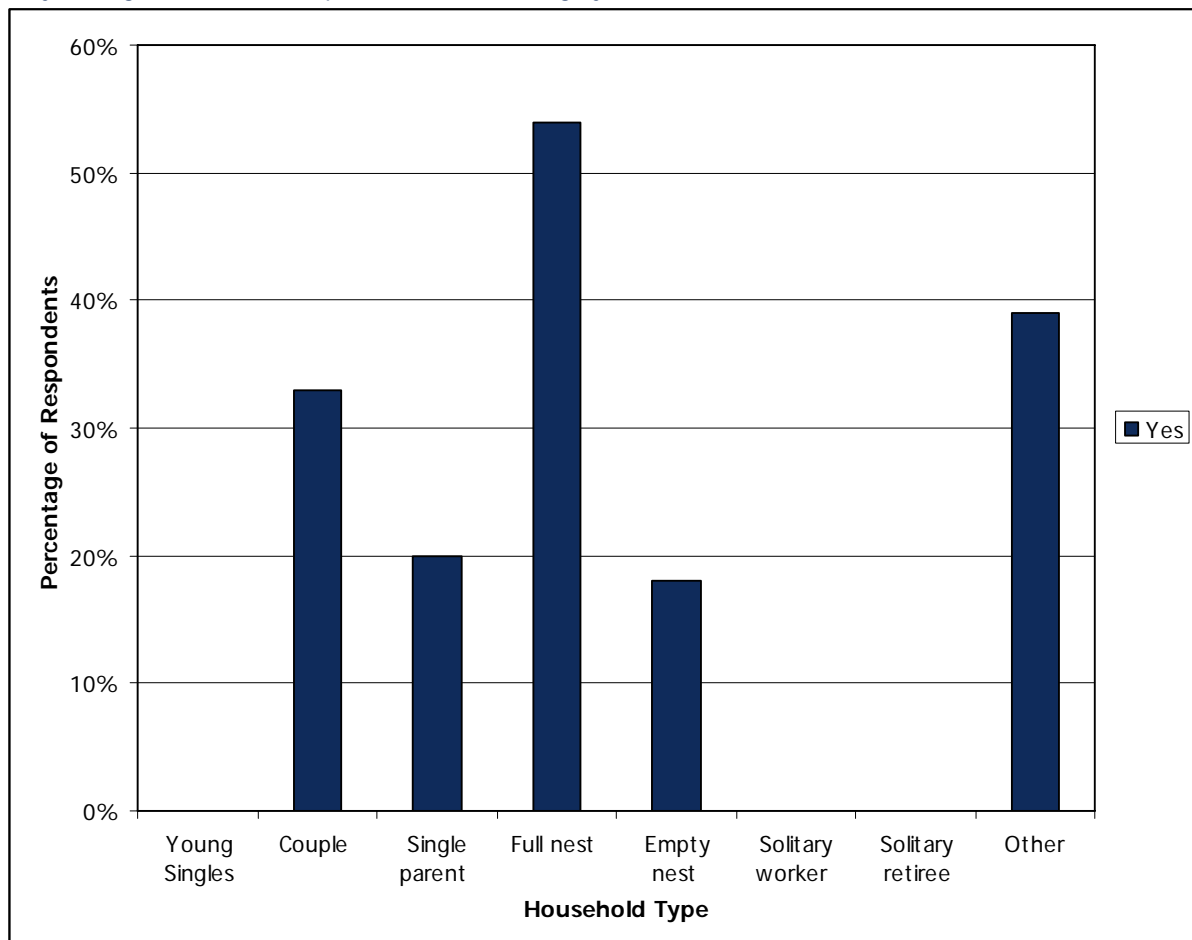


Over half (54%) of respondent living in detached houses with a family stated that they found it harder to recycle over Christmas. This would suggest that other members of the family would stay at the larger houses over this period but may produce too much recycling to store or sort out. This is a difficult barrier to overcome but possibly a solution would be for the visitors to take recycling with them when they leave. From the results earlier in the report even the super-committed recycler do not use other facilities provided by the council.

**Table 6.24:** Respondents in detached households saying whether or not it was harder to recycle at Christmas, grouped by lifecycle stage. Percentages are presented graphically in Figure 6.23

		Detached house type and household type							
		Young Singles	Couple	Single parent	Full nest	Empty nest	Solitary worker	Solitary retiree	Other
Yes	Count	0	3	2	72	16	0	0	5
	%	0%	33%	20%	54%	18%	0%	0%	39%
No	Count	1	6	8	62	73	5	14	8
	%	100%	67%	80%	46%	82%	100%	100%	62%
Total	Count	1	9	10	134	89	5	14	13
	%	100%	100%	100%	100%	100%	100%	100%	100%

**Figure 6.23** Respondents in detached households saying it was harder to recycle at Christmas, grouped by lifecycle stage. Numbers of respondents in each category are tabulated in Table 6.24



## 6.4 Knowledge and understanding

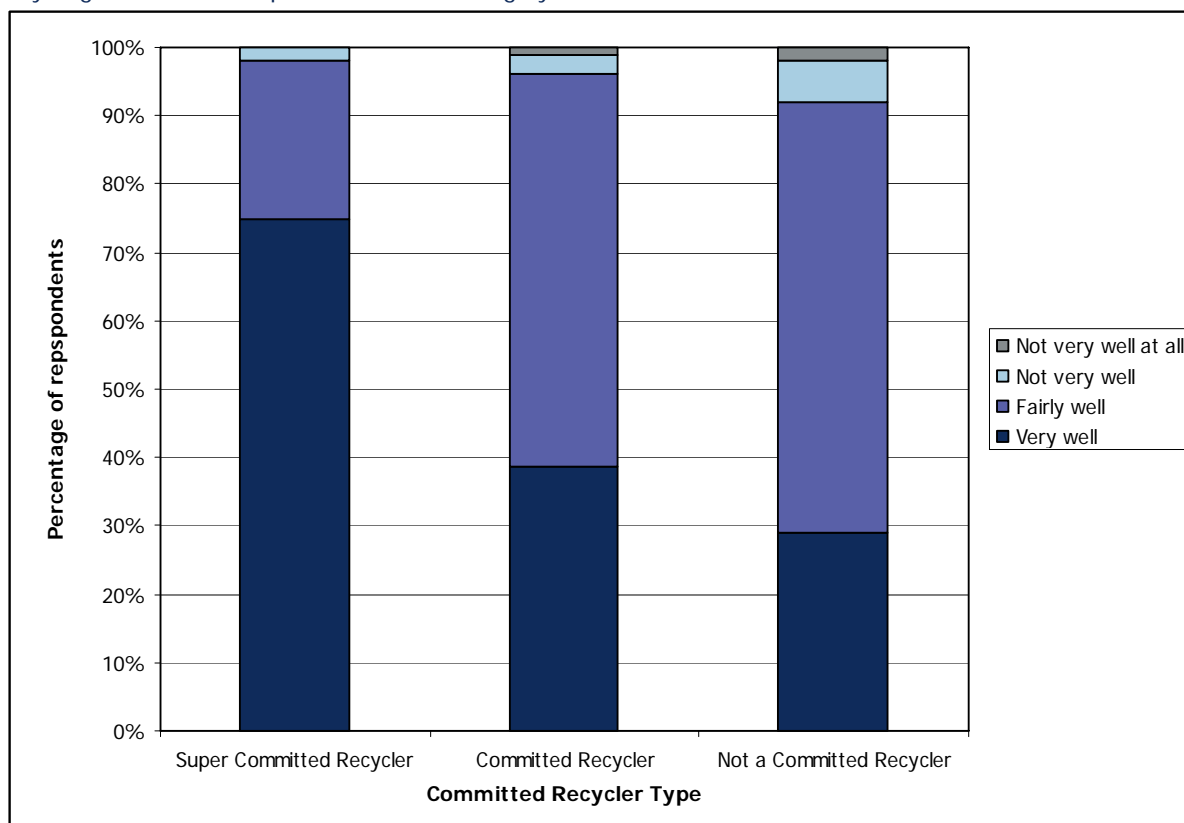
Next we examined to what extent a lack of knowledge and understanding is a barrier to people recycling.

Firstly, respondents were asked how well they understand what they are supposed to use their recycling containers for. Overall, slightly under half (48%) say they understand this 'very well'. For recycling to be effective it might be reasonable to expect that a clear majority of people should understand the scheme very well. While it is to an extent reassuring that only 4% of recyclers overall say they do not understand use of their containers well, the main focus would seem to fall on the corresponding 48% who say they understand 'fairly well'. This less than confident response suggests knowledge barriers reduce the effective participation of this group in their local recycling scheme. From the results below it is evident that the super-committed recycler are more aware of what exactly they are for more compared to committed recycler and not committed recyclers and are probably more effective recyclers as a result than the other two groups.

**Table 6.25:** How well respondents understand the use of their recycling containers, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.24

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Very well	334	75%	232	39%	93	29%	665	48%
Fairly well	105	23%	347	58%	205	63%	674	48%
Not very well	9	2%	16	3%	20	6%	48	3%
Not very well at all	0	0%	3	1%	5	2%	12	1%
Total	448	100%	598	100%	323	100%	1,399	100%

**Figure 6.24:** How well respondents understand the use of their recycling containers, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.25



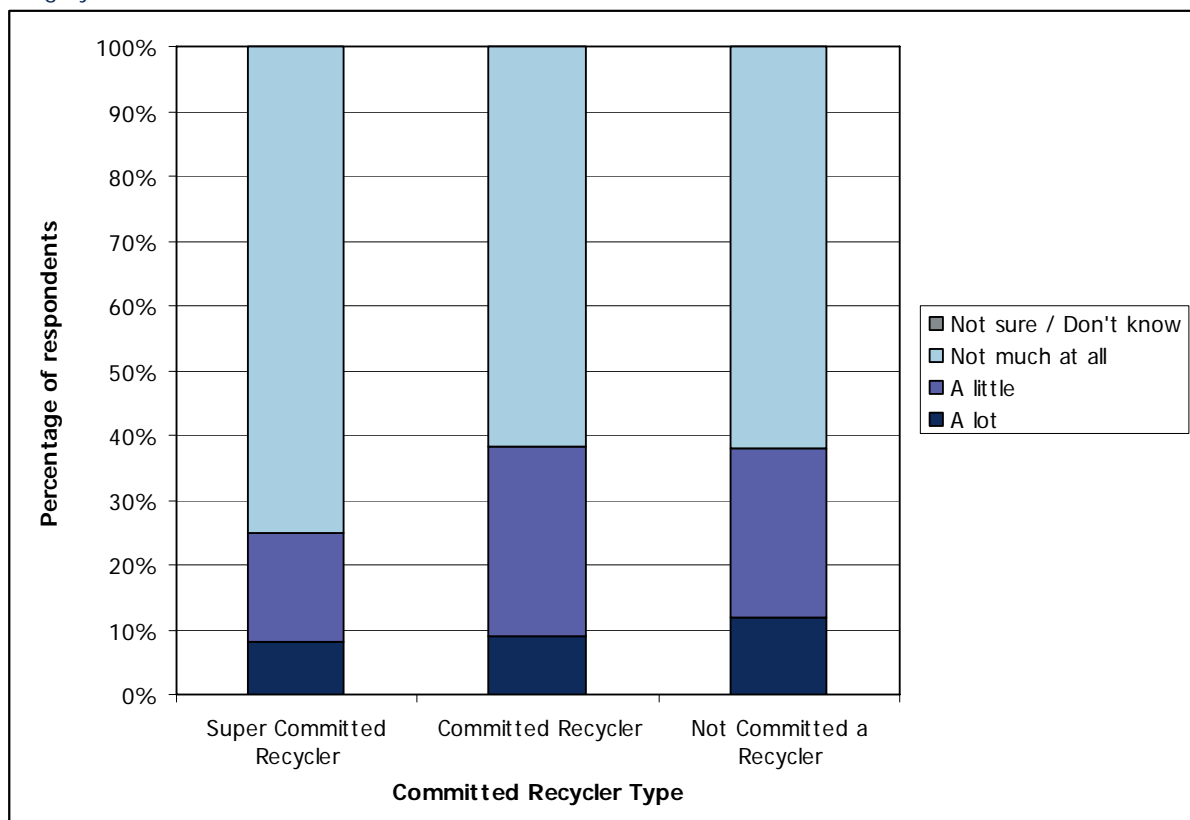
### 6.4.1 Information on collection service

Respondents were asked if it would make it easier if they had better information on the existing services such as collection days and times. Just over one third (35%) stated that better information would make it easier to use the existing services. More non committed and committed recyclers felt better information would make it easier. This is difficult to interpret as less super-committed stated that it would make recycling easier suggesting that lesser recycler types may not read the information when received.

**Table 6.26:** Respondents saying that better information about existing services such as the collection days and times would make it easier to recycle, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.25

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
A lot	36	8%	57	9%	41	12%	135	10%
A little	77	17%	180	29%	92	26%	350	25%
Not much at all	337	75%	373	61%	218	62%	936	66%
Not sure / Don't know	1	0%	2	0%	0	0%	3	0%
Total	451	100%	612	100%	351	100%	1,424	100%

**Figure 6.25:** Respondents saying that better information about existing services such as the collection days and times would make it easier to recycle, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.26



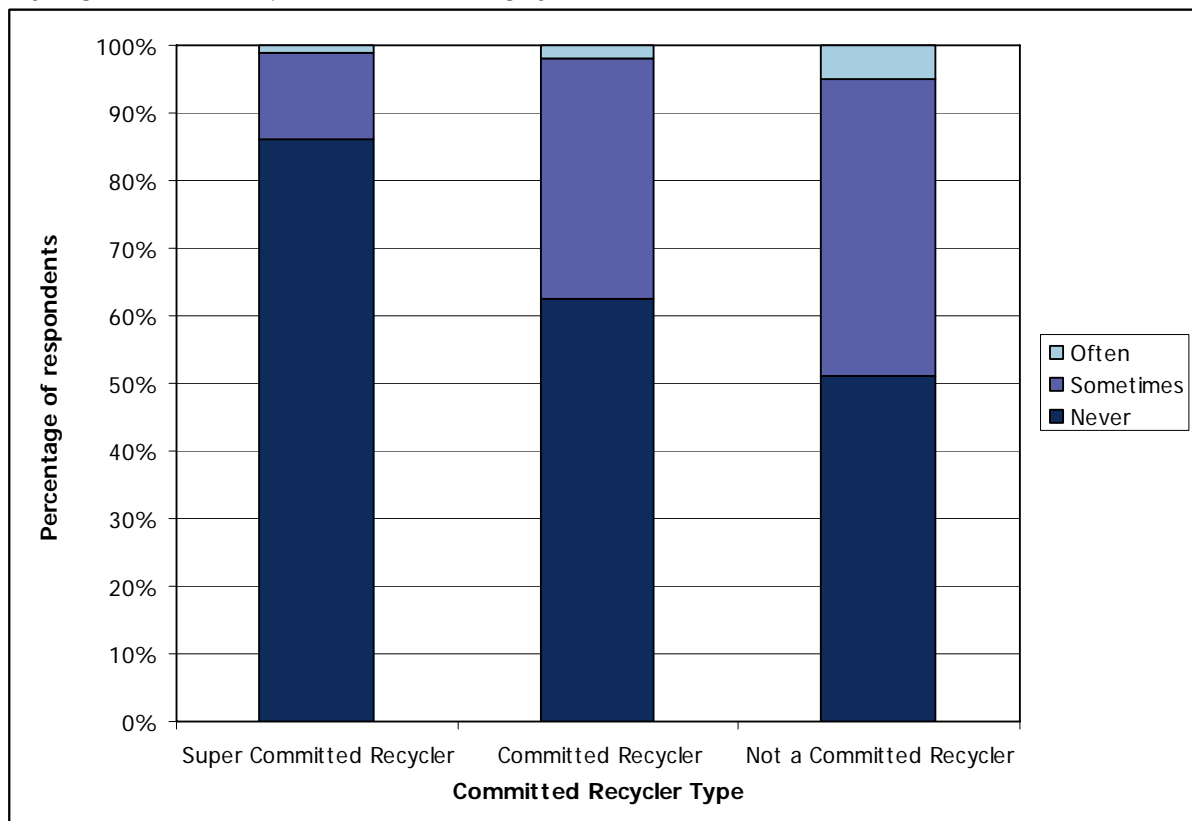
### 6.4.2 Forgetting to put recycling out

Respondents were asked how often they forgot to put out recycling for collection and a third admitted this sometimes (31%) or often (3%) happens, while overall 67% stated never. When broken down into commitment type almost half (49%) of non committed recycler group stated they sometimes or often forgot to put recycling out. In contrast just 14% of super-committed recyclers stated that they forget.

**Table 6.27:** Respondents reporting how frequently they forget to put recycling out, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.26

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Never	388	86%	382	63%	177	51%	955	67%
Sometimes	59	13%	217	36%	155	44%	435	31%
Often	6	1%	12	2%	18	5%	36	3%
Total	453	100%	611	100%	350	100%	1426	100%

**Figure 6.26:** Respondents reporting how frequently they forget to put recycling out, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.27



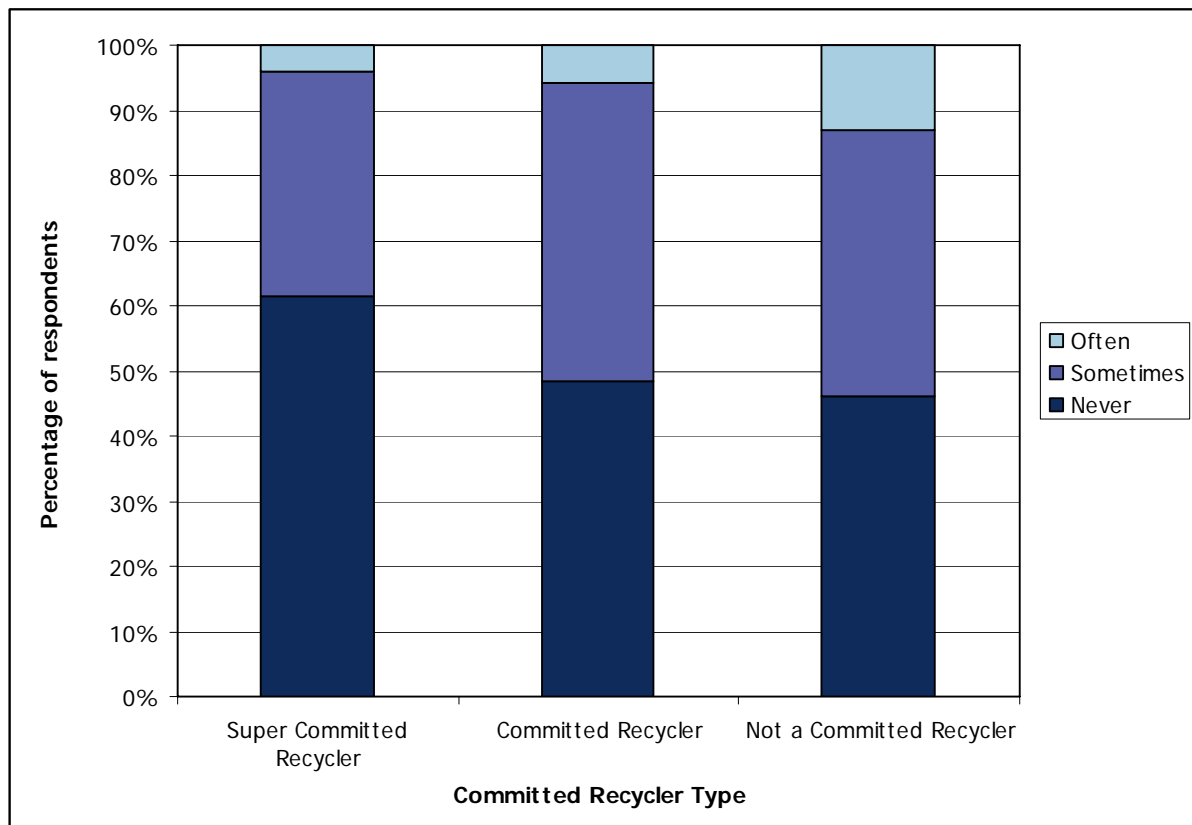
### 6.4.3 Disposal into the normal bin if not sure what if materials be recycled

Almost half of respondents admitted to throwing things in the bin if they were not sure it could be recycled. Uncertainty about this is therefore clearly a substantial and widespread barrier to effective recycling. Two fifths (39%) of super-committed recyclers stated they throw materials into the residual bin if they are not sure if it can be recycled. More non committed recyclers admitted that often throw materials away if they are not sure.

**Table 6.28:** The frequency of disposal of materials into the normal bin if respondents are not certain if it can be recycled, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.27

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Never	278	62%	296	49%	162	46%	736	52%
Sometimes	157	35%	279	46%	143	41%	579	41%
Often	17	4%	35	6%	44	13%	96	7%
Total	452	100%	610	100%	349	100%	1411	100%

**Figure 6.27:** The frequency of disposal of materials into the normal bin if respondents are not certain if it can be recycled, grouped by committed recycler type. Numbers of respondents in each category are tabulated in Table 6.28

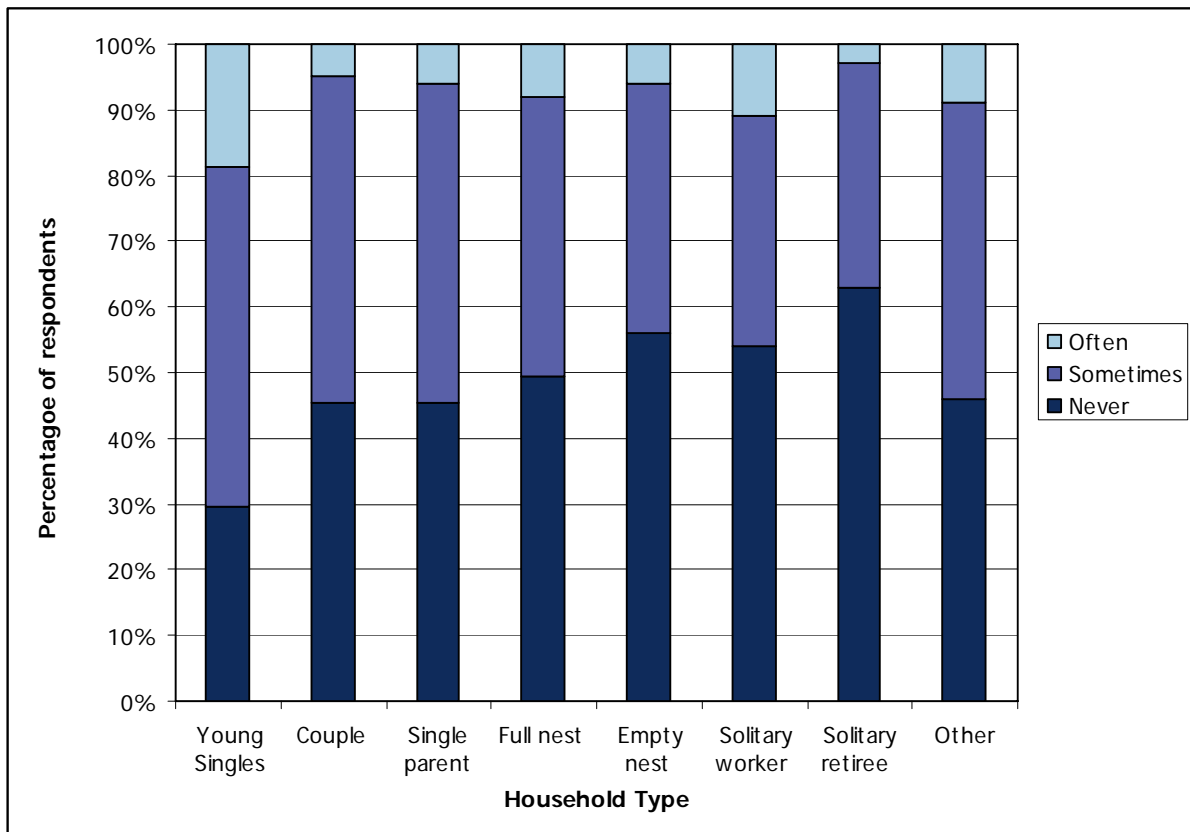


Young singles are most likely to throw things in the normal residual bin if they are not sure if it can be recycled. Almost one fifth (19%) stated they often throw materials into the bin if they are not sure. The least likely are solitary retirees that may suggest they are more educated of exactly what materials can be recycled.

**Table 6.29:** The frequency of disposal of materials into the normal bin if respondents are not certain if it can be recycled, grouped by lifecycle type. Percentages are presented graphically in Figure 6.28

	Young Singles		Couple		Single parent		Full nest	
	Count	%	Count	%	Count	%	Count	%
Never	8	30%	40	46%	45	46%	248	50%
Sometimes	14	52%	44	50%	48	49%	215	43%
Often	5	19%	4	5%	6	6%	38	8%
	Empty nest		Solitary worker		Solitary retiree		Other	
	Count	%	Count	%	Count	%	Count	%
Never	209	56%	34	54%	119	63%	31	46%
Sometimes	140	38%	22	35%	64	34%	30	45%
Often	23	6%	7	11%	6	3%	6	9%

**Figure 6.28:** The frequency of disposal of materials into the normal bin if respondents are not certain if it can be recycled grouped by lifecycle type. Numbers of respondents in each category are tabulated in Table 6.29



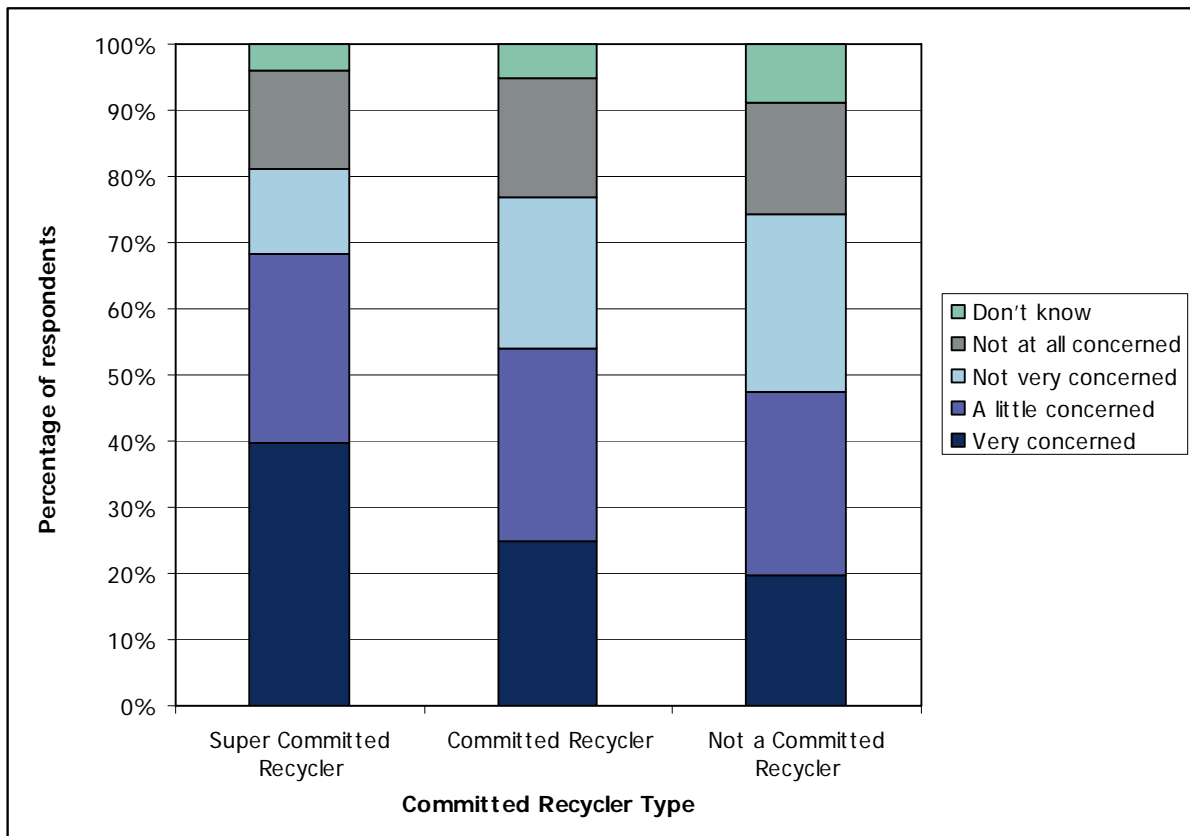
### 6.4.4 Concern about recycle not actually being recycled

Respondents were asked how concerned they are that the materials they put out for collection at the kerbside may not actually be recycled. Overall 57% were concerned with committed recycler being most concern and non committed recyclers being the least concerned. This suggests that if there was more information about what happens to recycling once it is collected from the kerbside, the non committed recyclers may recycle more as they would be more motivated.

**Table 6.30:** How concerned respondents are about recycling not being recycled, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.29

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Very concerned	179	40%	154	25%	69	20%	402	29%
A little concerned	129	29%	174	29%	97	28%	400	28%
Not very concerned	58	13%	141	23%	95	27%	294	21%
Not at all concerned	66	15%	109	18%	58	17%	233	16%
Don't know	20	4%	33	5%	30	9%	83	6%
Total	452	100%	611	100%	349	100%	1412	100%

**Figure 6.29:** How concerned respondents are about recycling not being recycled, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.30



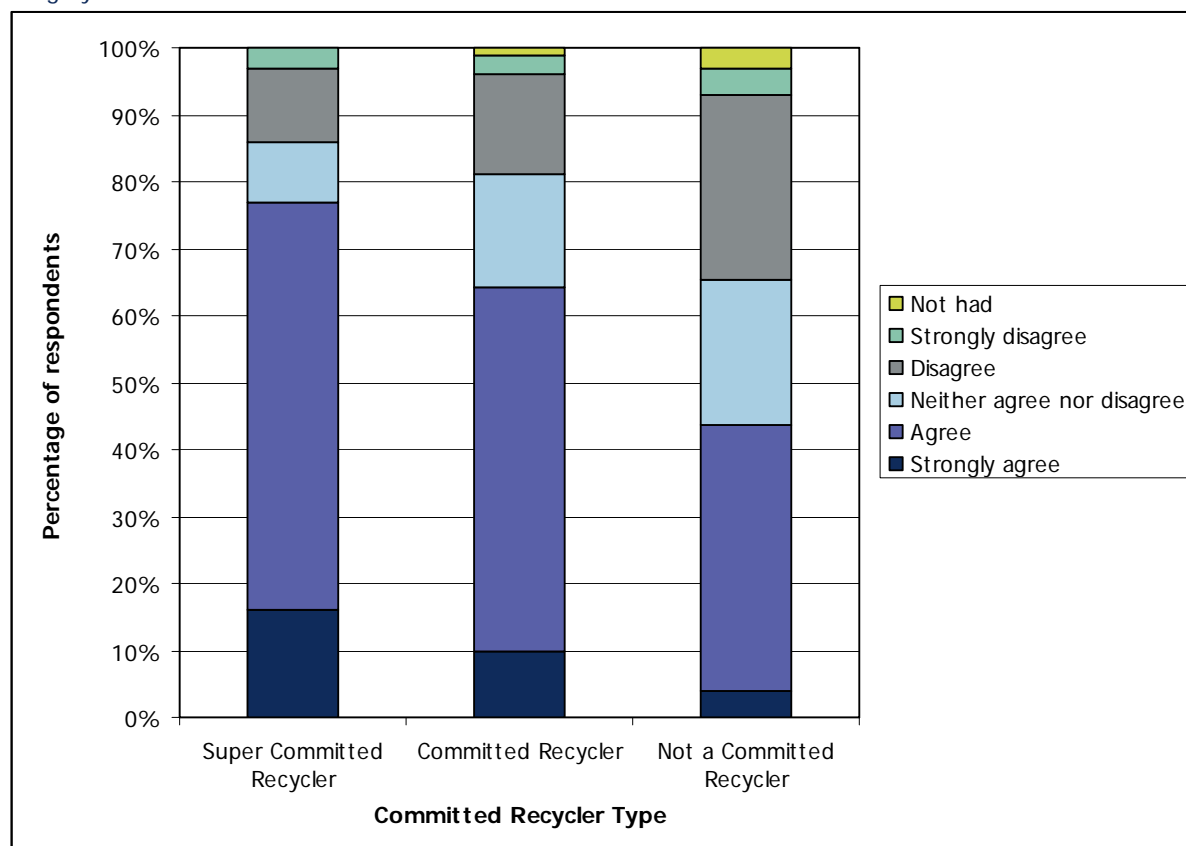
### 6.4.5 Council information on the overall recycling scheme

Respondents were asked if they agreed that council's information has helped them to understand the recycling scheme overall and 63% agreed it had. When split down to into levels of commitment to recycling just 43% of non committed recyclers agreed. Over three quarters of super-committed (77%) recyclers agreed.

**Table 6.31:** Respondents level of agreement that council information about the scheme has helped them to understand the recycling scheme overall, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.30

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Strongly agree	72	16%	58	10%	13	4%	143	10%
Agree	275	61%	334	55%	138	40%	747	53%
Neither agree nor disagree	41	9%	104	17%	76	22%	221	16%
Disagree	48	11%	89	15%	99	28%	236	17%
Strongly disagree	14	3%	20	3%	13	4%	47	3%
Not had	2	0%	5	1%	9	3%	16	1%
<b>Total</b>	<b>452</b>	<b>100%</b>	<b>610</b>	<b>100%</b>	<b>348</b>	<b>100%</b>	<b>1410</b>	<b>100%</b>

**Figure 6.30:** Respondents level of agreement that council information about the scheme has helped them to understand the recycling scheme overall, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.31



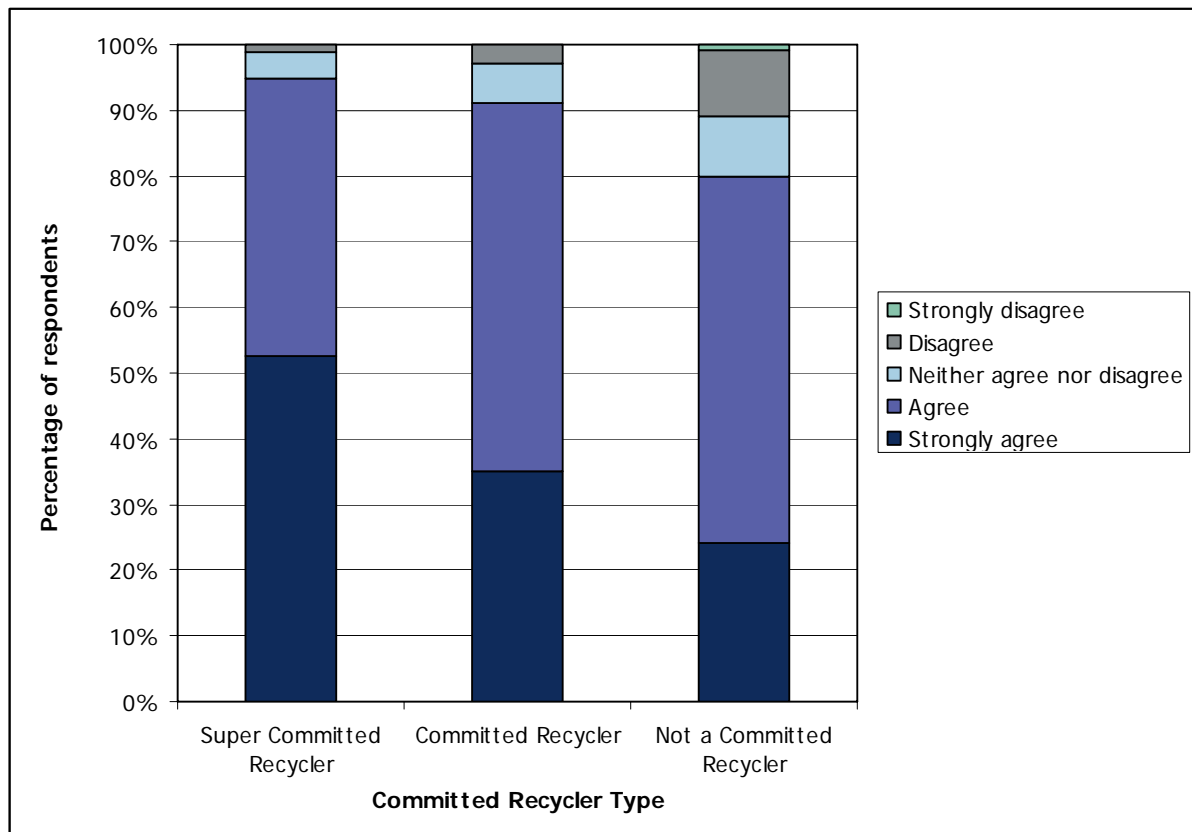
## 6.5 Motivation and values barriers

Respondents were asked if they agreed that when they recycled they felt they were doing their bit for the environment and 89% agreed with this. When split into commitment type 95% of super-committed recyclers agreed compared to 80% of non committed recyclers. This suggests that a segment of the non committed recycler group recycle for other reasons. This is an important finding from the communications perspective, as it shows that the environmental driver is not universal and not in itself a pre-requisite to motivate all recyclers to recycle.

**Table 6.32:** Agreement that by recycling respondents were doing their bit for the environment, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.31

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Strongly agree	235	52%	212	35%	83	24%	530	38%
Agree	190	42%	345	56%	195	56%	730	52%
Neither agree nor disagree	18	4%	39	6%	32	9%	89	6%
Disagree	6	1%	16	3%	34	10%	56	4%
Strongly disagree	0	0%	0	0%	4	1%	4	0%
Total	449	100%	612	100%	348	100%	1409	100%

**Figure 6.31:** Agreement that by recycling respondents were doing their bit for the environment, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.32

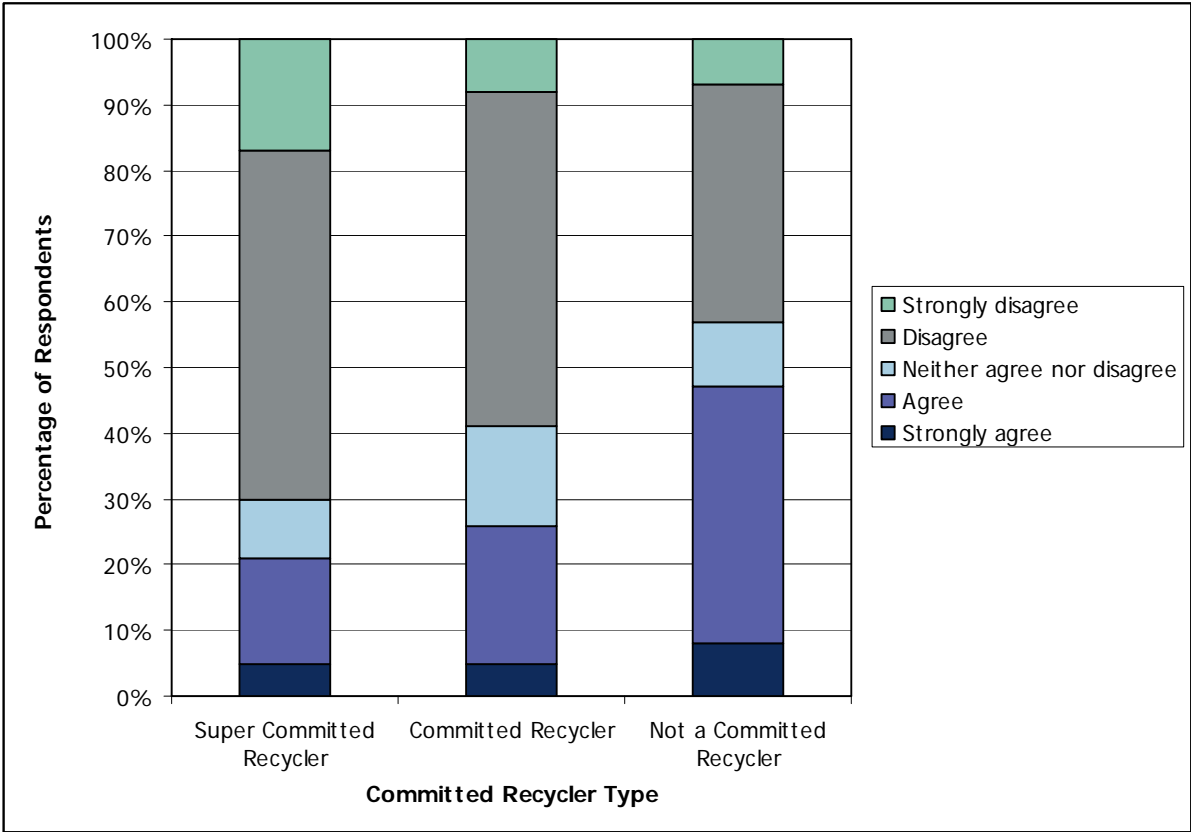


Leading on from this question, it is important to identify why the non committed recyclers are recycling as not all do it for environmental reasons. The table below indicates that the non committed recyclers are more likely to participate than committed recyclers because the council tells them to do it rather than for environmental reasons.

**Table 6.33:** Agreement that respondents were recycling because the council tells them to do so, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.32

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Strongly agree	24	5%	29	5%	28	8%	81	6%
Agree	70	16%	129	21%	135	39%	334	24%
Neither agree nor disagree	39	9%	93	15%	36	10%	168	12%
Disagree	238	53%	310	51%	124	36%	672	48%
Strongly disagree	78	17%	50	8%	23	7%	151	11%
Total	449	100%	611	100%	346	100%	1406	100%

**Figure 6.32:** Agreement that respondents were recycling because the council tells them to do so, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.33

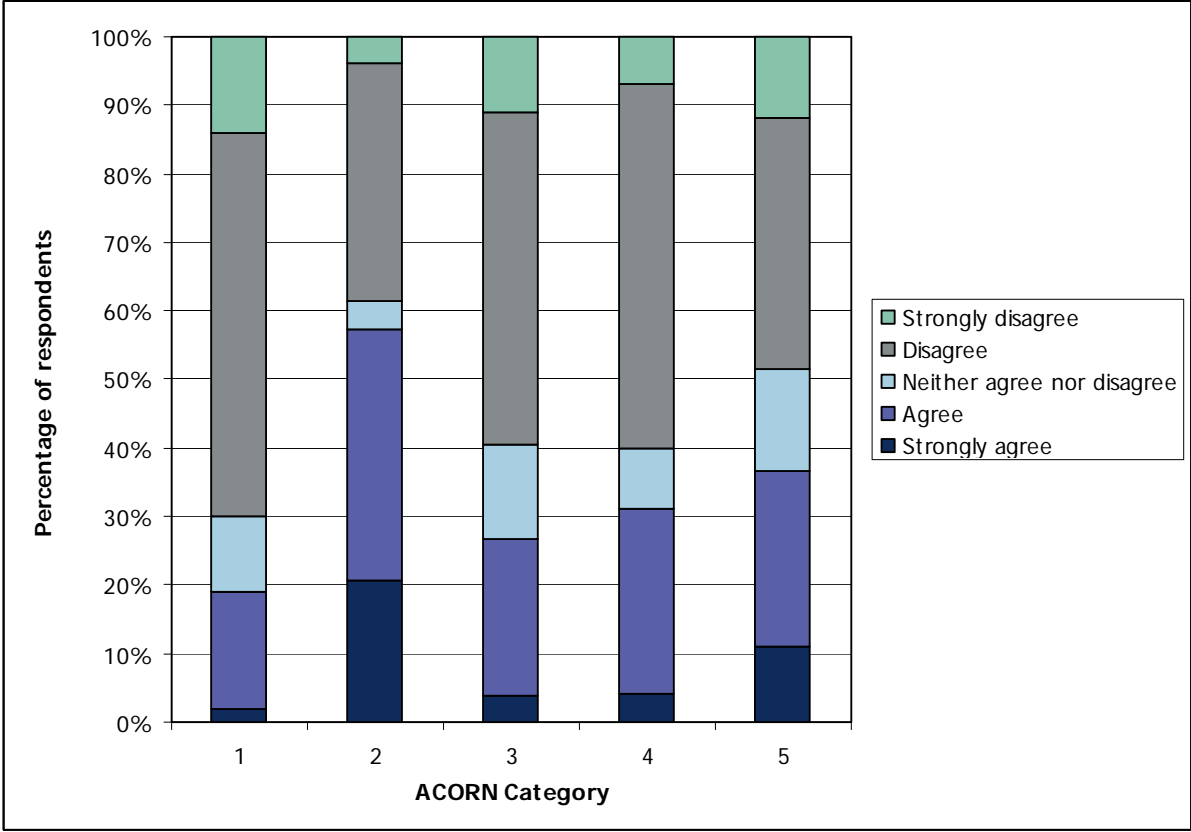


When cross-tabulated with ACORN, respondents in category 2 are more likely (58%) to state they strongly agree/agree they recycle because the council are telling them to compared to 30% overall. As suggested previously it may be worthwhile to delve deeper into this category and analyse more specifically, the ACORN sub-types whose recycling behaviour is prompted most by this factor.

**Table 6.34:** Agreement that respondents were recycling because the council tells them to do so, grouped by ACORN. Percentages are presented graphically in Figure 6.33

	ACORN											
	1		2		3		4		5		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Strongly agree	5	2%	18	21%	18	4%	10	4%	28	11%	79	6%
Agree	46	17%	31	37%	118	23%	64	27%	68	26%	327	24%
Neither agree nor disagree	30	11%	3	4%	71	14%	22	9%	39	15%	165	12%
Disagree	155	56%	29	35%	250	49%	125	53%	96	37%	655	48%
Strongly disagree	39	14%	3	4%	58	11%	17	7%	31	12%	148	11%

**Figure 6.33:** Agreement that respondents were recycling because the council tells them to do so, grouped by ACORN. Numbers of respondents in each category are tabulated in Table 6.34

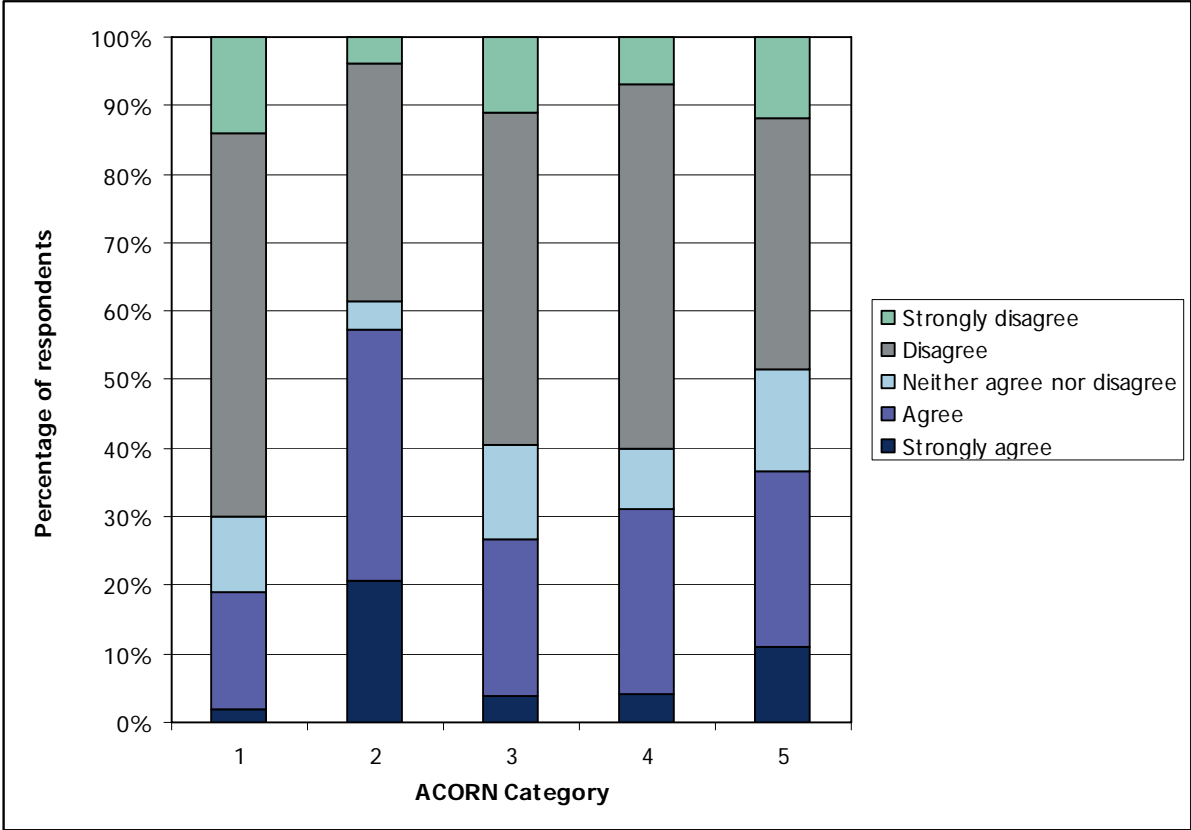


Respondents were asked if they agree or disagree that they recycle because everyone else is doing it and over one quarter (28%) of non committed recyclers agreed with this. In contrast only one tenth (10%) of super-committed recycler agreed with this and 81% disagreed this was the reason.

**Table 6.35:** Agreement that respondents recycling because everyone else is doing it, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.34

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Strongly agree	8	2%	5	1%	8	2%	21	1%
Agree	34	8%	86	14%	91	26%	211	15%
Neither agree nor disagree	37	8%	61	10%	35	10%	133	9%
Disagree	228	51%	328	54%	159	46%	715	51%
Strongly disagree	141	31%	131	21%	53	15%	325	23%
Total	448	100%	611	100%	346	100%	1405	100%

**Table 6.34:** Agreement that respondents were recycling because everyone else is doing it, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.35

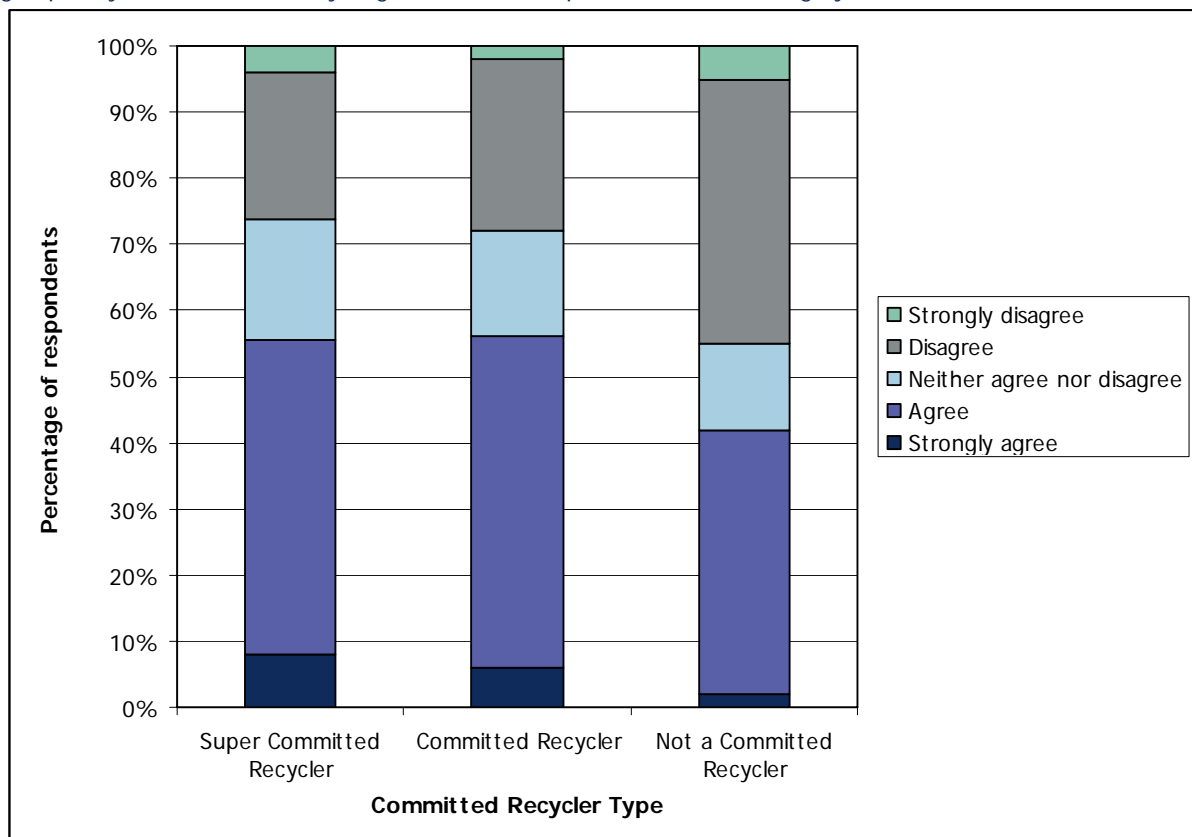


Respondents were asked how they feel when they don't recycle something they could and if they agreed or disagreed that not recycling things made them feel guilty. The reason for asking this question is to examine the power of 'guilt' as a motivator and by the same token, identify the extent to which the absence of 'guilt' is a barrier to people recycling as much as they could. Over half (52%) agreed that they felt guilty but 45% of non committed recyclers disagreed that they felt guilty, validating the suggestion that the absence of a sense of guilt may be connected with lower levels of commitment to recycling.

**Table 6.36:** Agreement with the statement 'I feel guilty when I don't recycle something that could be recycled', grouped by commitment to recycling. Percentages are presented graphically in Figure 6.35

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Strongly agree	37	8%	34	6%	6	2%	77	5%
Agree	212	47%	309	50%	137	40%	658	47%
Neither agree nor disagree	82	18%	97	16%	45	13%	224	16%
Disagree	97	22%	159	26%	140	40%	396	28%
Strongly disagree	19	4%	13	2%	18	5%	50	4%
Total	447	100%	612	100%	346	100%	1405	100%

**Figure 6.35:** Agreement with the statement 'I feel guilty when I don't recycle something that could be recycled', grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.36

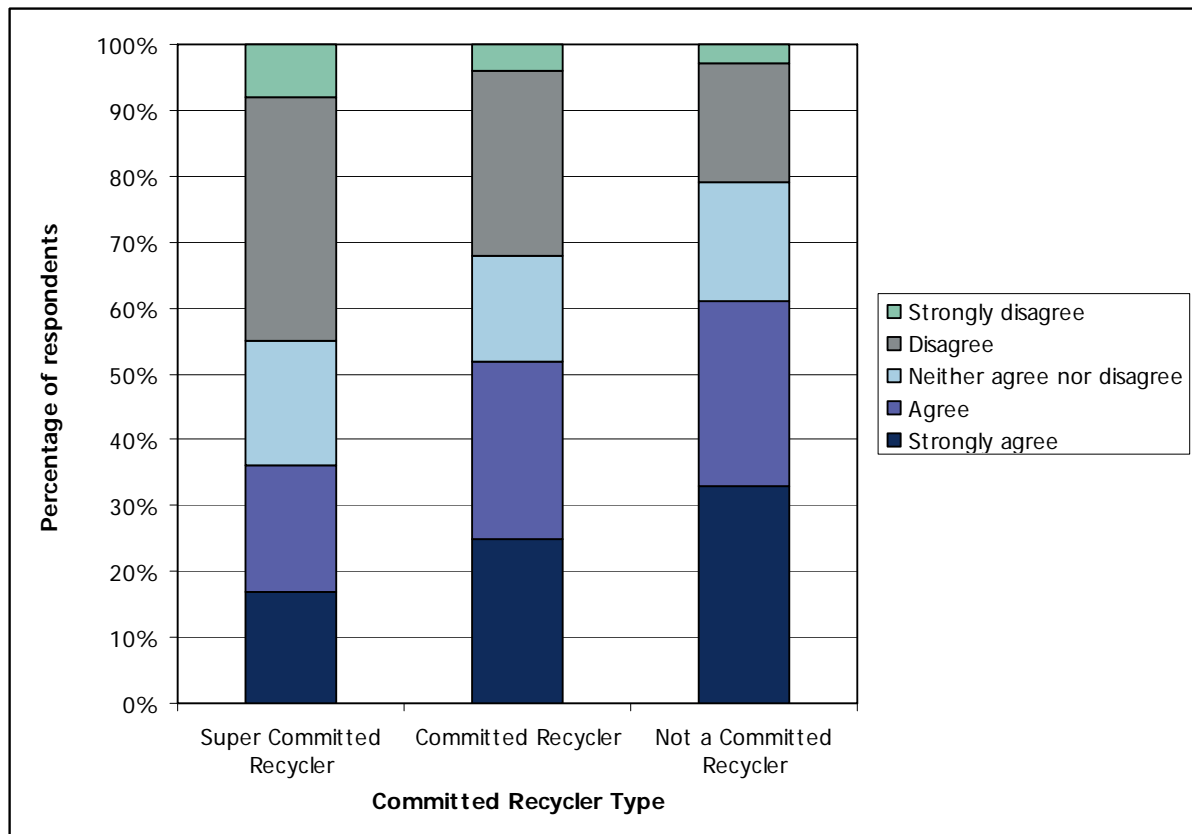


Respondents were asked if they agreed or not with the view that that 'they paid to much council tax, to be asked to sort my own waste'. The majority of non committed recyclers agreed that they did (61%). Less super-committed recyclers felt they did not pay too much to be expected to separate recyclables (36%).

**Table 6.37:** Agreement with the statement 'I pay to much council tax, to be asked to sort my own waste', grouped by commitment to recycling. Percentages are presented graphically in Figure 6.36

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Strongly agree	78	17%	154	25%	115	33%	347	25%
Agree	85	19%	163	27%	97	28%	345	25%
Neither agree nor disagree	84	19%	98	16%	62	18%	244	17%
Disagree	164	37%	167	28%	63	18%	394	28%
Strongly disagree	36	8%	22	4%	11	3%	69	5%
Total	447	100%	604	100%	348	100%	1399	100%

**Figure 6.36:** Agreement with the statement 'I pay to much council tax, to be asked to sort my own waste', grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.37

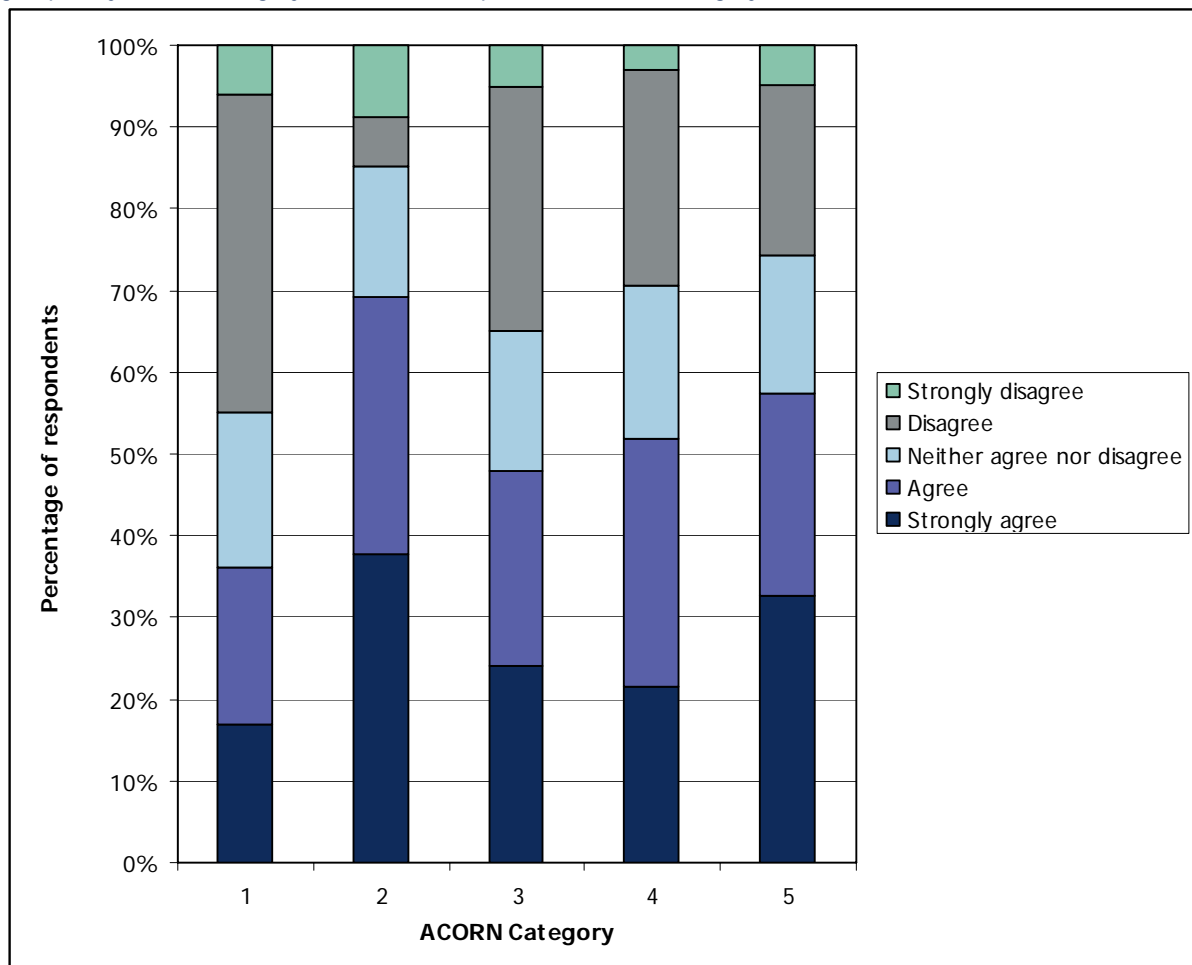


Following on from the 'pay too much council tax to sort waste' question the results have been cross tabulated by ACORN and it clearly indicates that: Category 2 respondents agree that they pay too much council tax to sort their waste (70%). Less respondents in the other categories felt they paid too much council tax to sort waste (36%).

**Table 6.38:** Agreement with the statement 'I pay too much council tax, to be asked to sort my own waste', grouped by ACORN category. Percentages are presented graphically in Figure 6.37

	ACORN											
	1		2		3		4		5		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Strongly agree	47	17%	31	38%	122	24%	51	22%	87	33%	338	25%
Agree	51	19%	26	32%	122	24%	72	31%	65	25%	336	25%
Neither agree nor disagree	52	19%	13	16%	86	17%	44	19%	44	17%	239	18%
Disagree	107	39%	5	6%	154	30%	63	27%	55	21%	384	28%
Strongly disagree	17	6%	7	9%	26	5%	6	3%	14	5%	70	5%
<b>Total</b>	<b>274</b>	<b>100%</b>	<b>82</b>	<b>100%</b>	<b>510</b>	<b>100%</b>	<b>236</b>	<b>100%</b>	<b>265</b>	<b>100%</b>	<b>1,367</b>	<b>100%</b>

**Figure 6.37:** Agreement with the statement 'I pay too much council tax, to be asked to sort my own waste', grouped by ACORN category. Numbers of respondents in each category are tabulated in Table 6.38

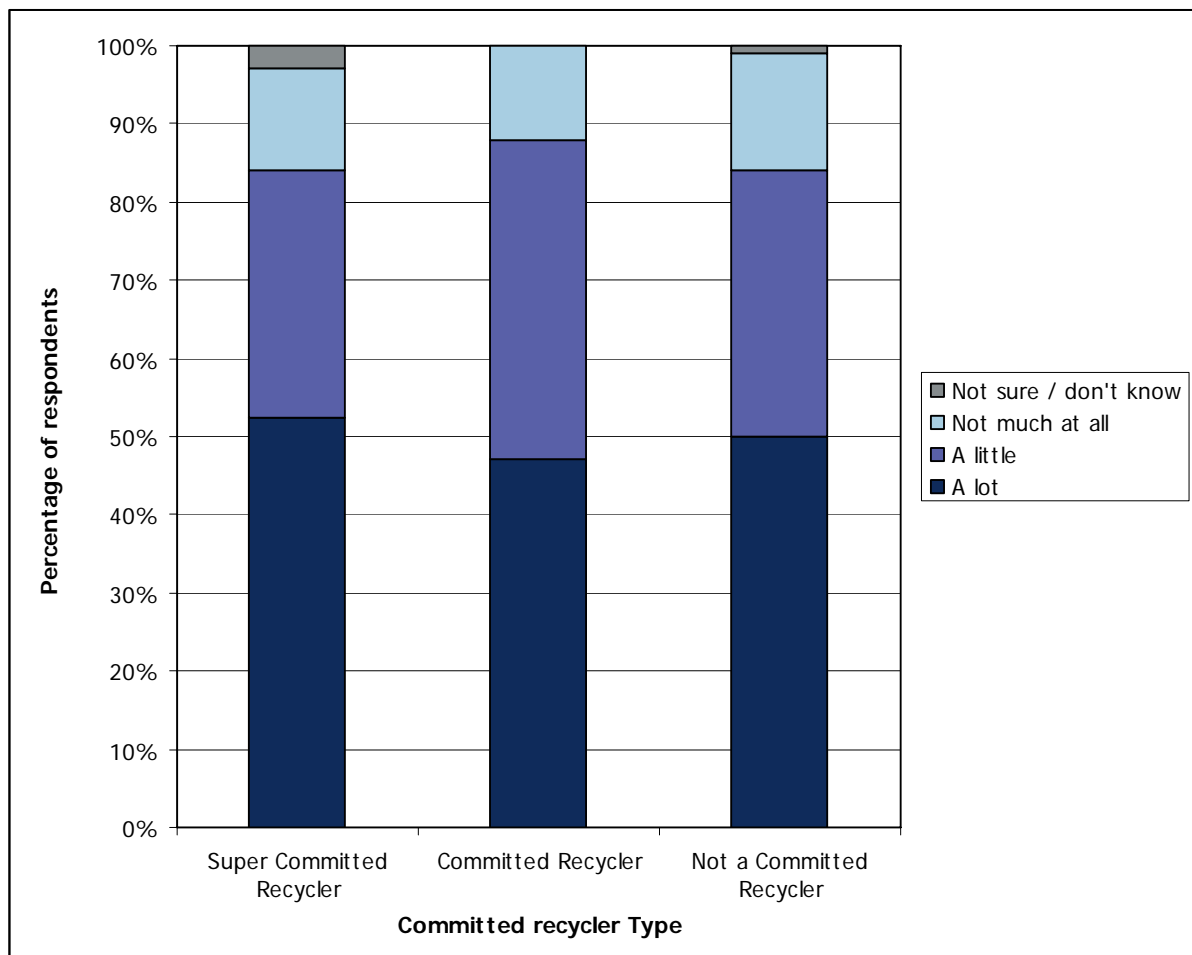


Respondents were asked if they would recycle more if they saw the practical impact of recycling in their local area. The majority (86%) stated that they would indeed recycle more if they saw the practical impact of recycling in the area they lived. There is very little difference in the opinions between the types of committed recycler.

**Table 6.39:** How much more respondents would recycle if they could see the practical impact of recycling in their local area, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.38

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
A lot	237	53%	285	47%	174	50%	696	49%
A little	142	32%	247	41%	120	34%	509	36%
Not much at all	58	13%	75	12%	53	15%	186	13%
Not sure / don't know	13	3%	2	0%	2	1%	17	1%
Total	450	100%	609	100%	349	100%	1408	100%

**Figure 6.38:** How much more respondents would recycle if they could see the practical impact of recycling in their local area, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.39

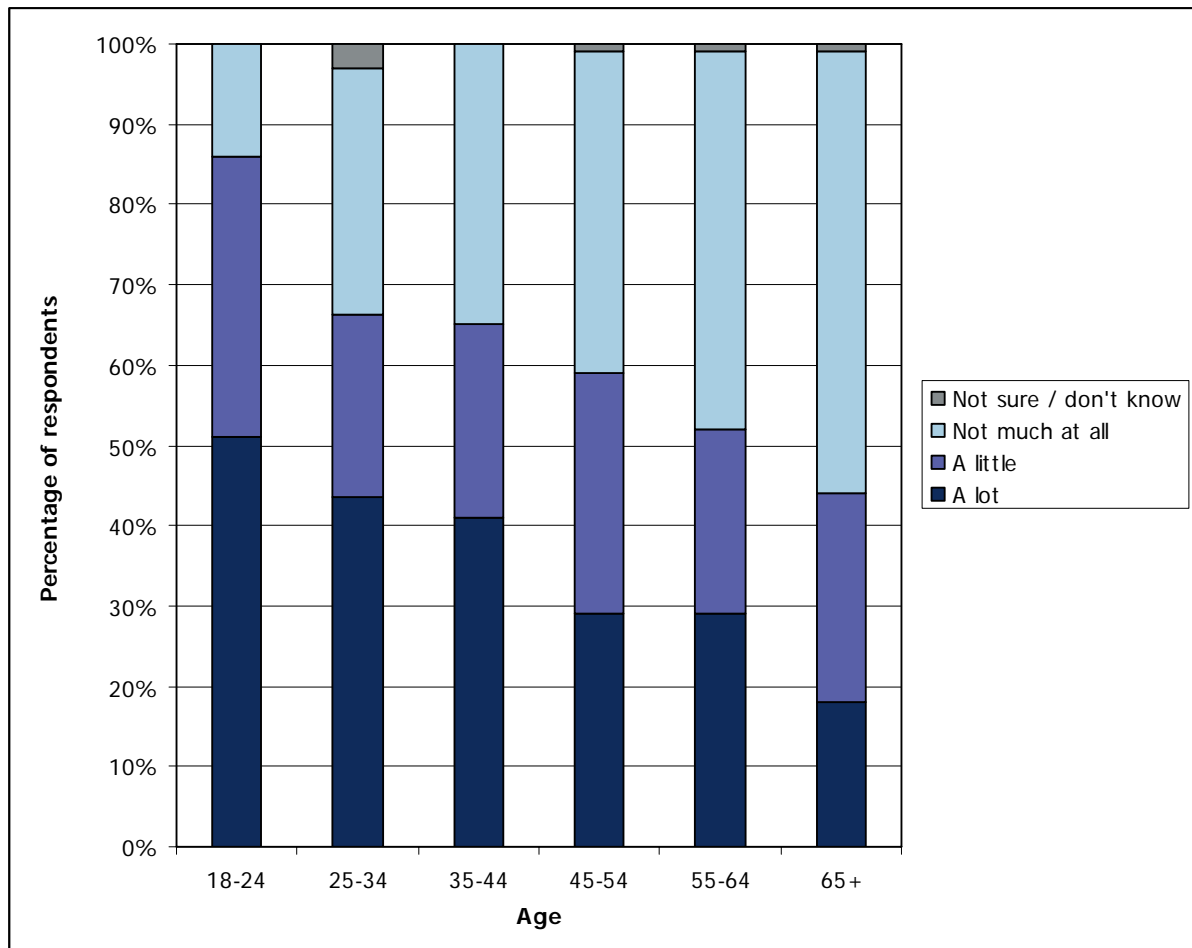


Respondents were asked to what extent they would recycle more things more often if they received an incentive. Over half (56%) stated this would make a little/a lot of difference to the amount they would recycle. When broken down into age groups 86% of 18-24s stated they would recycle more compared to 44% of 65+.

**Table 6.40:** How much more respondents would recycle if they received an incentive for recycling, grouped by age. Percentages are presented graphically in Figure 6.39

	18-24		25-34		35-44		45-54		55-64		65+	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
A lot	26	51%	74	44%	116	41%	73	29%	66	29%	77	18%
A little	18	35%	39	23%	68	24%	77	30%	51	23%	112	26%
Not much at all	7	14%	52	31%	101	35%	100	40%	106	47%	235	55%
Not sure / don't know	0	0%	5	3%	1	0%	3	1%	3	1%	6	1%

**Figure 6.39:** How much more respondents would recycle if they received an incentive for recycling, grouped by age. Numbers of respondents in each category are tabulated in Table 6.40

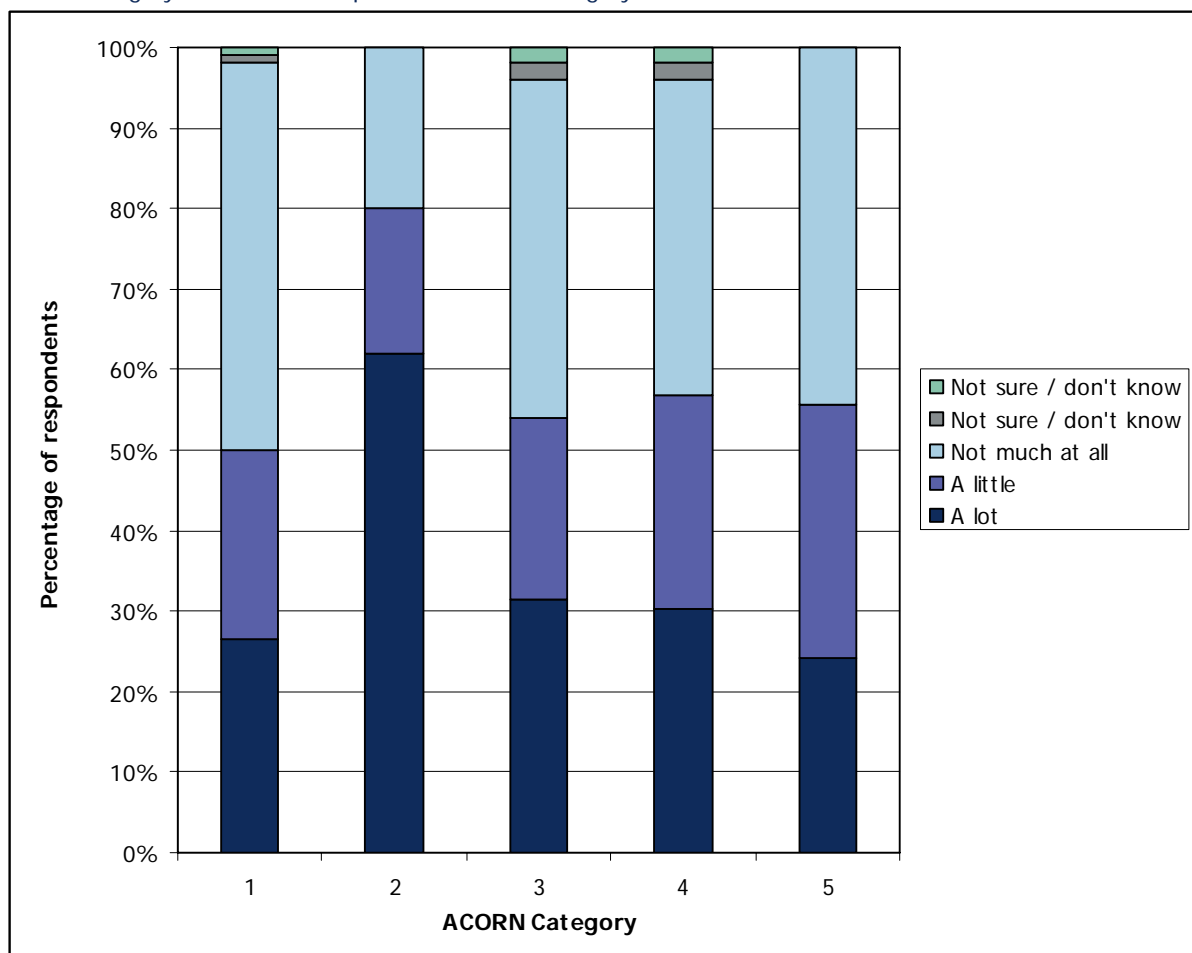


Following on from this question, the results have been cross tabulated by ACORN and it was found that 80% of category 2 respondents stated that an incentive would encourage them to recycle more things more often.

**Table 6.41:** How much more respondents would recycle if they received an incentive for recycling, grouped by ACORN category. Percentages are presented graphically in Figure 6.40

ACORN												
	1		2		3		4		5		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
A lot	73	27%	52	62%	163	32%	73	31%	64	24%	425	31%
A little	65	24%	15	18%	121	23%	64	27%	83	31%	348	25%
Not much at all	134	49%	17	20%	225	43%	96	40%	116	44%	588	43%
Not sure / don't know	3	1%	0	0%	9	2%	5	2%	1	0%	18	1%
Not sure / don't know	3	1%	0	0%	9	2%	5	2%	1	0%	18	1%

**Figure 6.40:** How much more respondents would recycle if they received an incentive for recycling, grouped by ACORN category. Numbers of respondents in each category are tabulated in Table 6.41



Respondents were asked would it encourage them to recycle more, if they knew more about the way recycling helps to tackle climate change. Overall 55% stated that it would a little/a lot. A slightly higher percentage (62%) of super-committed recyclers stated it would. It seems though that across all the types of recyclers more information on the link of climate change and recycling would help increase recycling.

**Table 6.42:** How much more respondents would recycle if they knew more about the way recycling helps to tackle climate change, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.41

	Super Committed		Committed		Not a Committed Recycler		Total	
	Count	%	Count	%	Count	%	Count	%
A lot	152	34%	129	21%	64	18%	345	24%
A little	128	29%	200	33%	106	30%	434	31%
not much at all	163	36%	274	45%	177	51%	614	44%
Not sure / Don't know	6	1%	9	1%	3	1%	18	1%
Total	449	100%	612	100%	350	100%	1411	100%

**Figure 6.41:** How much more respondents would recycle if they knew more about the way recycling helps to tackle climate change, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.42

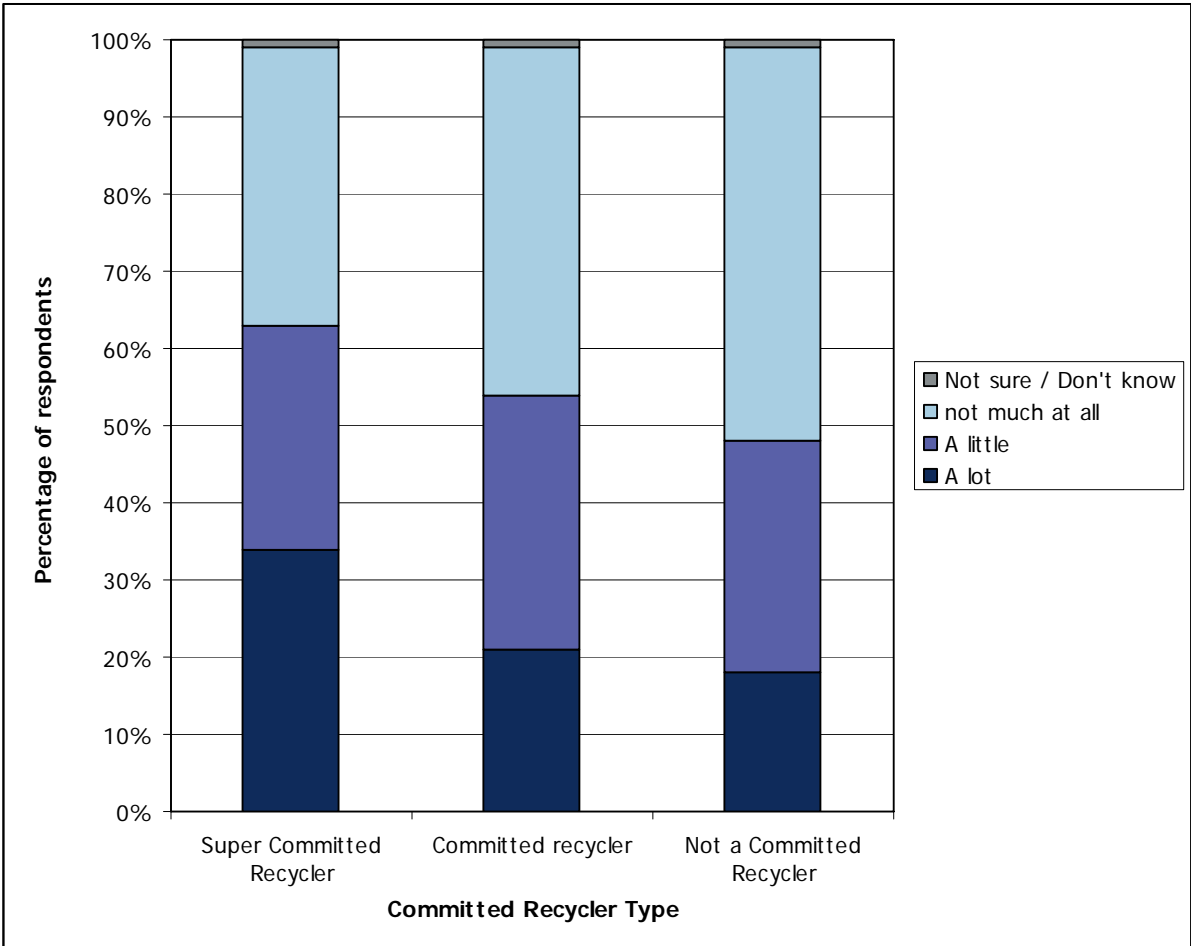
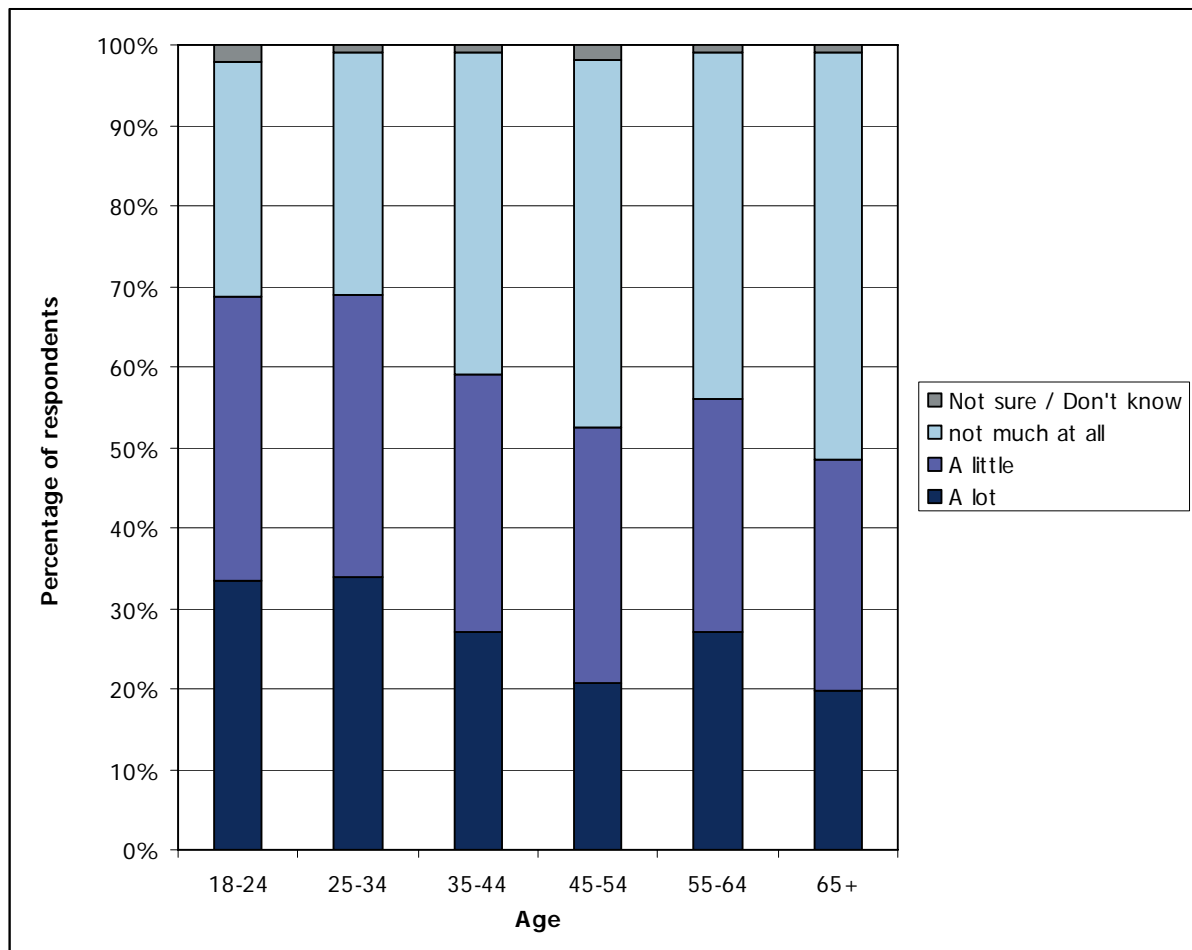


Figure 6.43 shows that more of the younger age groups require more information on link between recycling and climate change.

**Table 6.43:** How much more respondents would recycle if they knew more about the way recycling helps to tackle climate change, grouped by age. Percentages are presented graphically in Figure 6.42

	18-24		25-34		35-44		45-54		55-64		65+	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
A lot	17	33%	58	34%	77	27%	53	21%	61	27%	84	20%
A little	18	35%	59	35%	91	32%	80	32%	65	29%	123	29%
not much at all	15	29%	51	30%	114	40%	117	46%	97	43%	218	51%
Not sure / Don't know	1	2%	2	1%	3	1%	4	2%	3	1%	5	1%

**Figure 6.42:** How much more respondents would recycle if they knew more about the way recycling helps to tackle climate change, grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.43

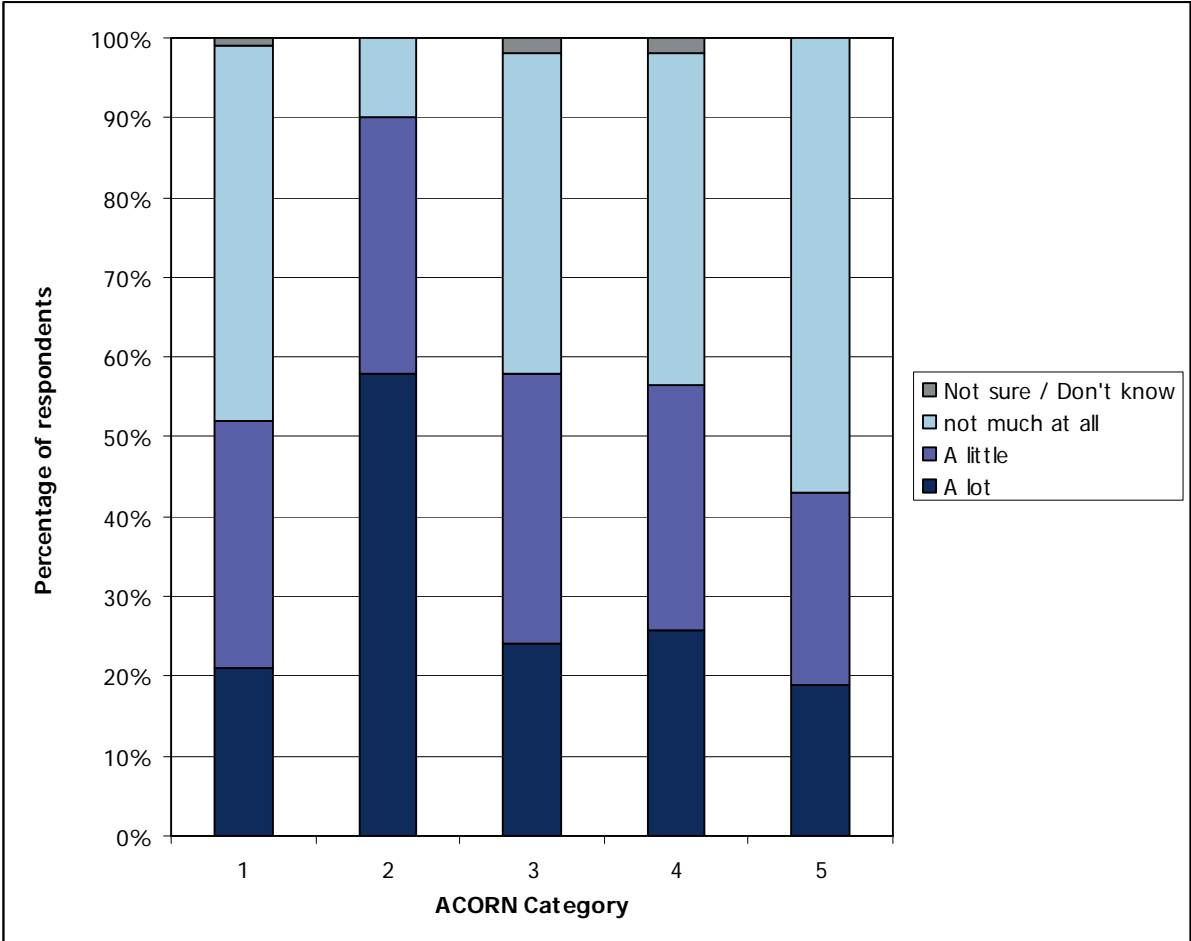


The majority of ACORN 2 respondents (90%) stated that they would recycle more if they had more information on how recycling helps to tackle climate change.

**Table 6.44:** How much more respondents would recycle if they knew more about the way recycling helps to tackle climate change, grouped by ACORN category. Percentages are presented graphically in Figure 6.43

ACORN												
	1		2		3		4		5		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
A lot	57	21%	49	58%	123	24%	62	26%	49	19%	340	25%
A little	86	31%	27	32%	174	34%	73	31%	63	24%	423	31%
not much at all	129	47%	8	10%	209	40%	99	42%	152	57%	597	43%
Not sure / Don't know	3	1%	0	0%	11	2%	4	2%	1	0%	19	1%

**Figure 6.43:** How much more respondents would recycle if they knew more about the way recycling helps to tackle climate change, grouped by ACORN category. Numbers of respondents in each category are tabulated in Table 6.44



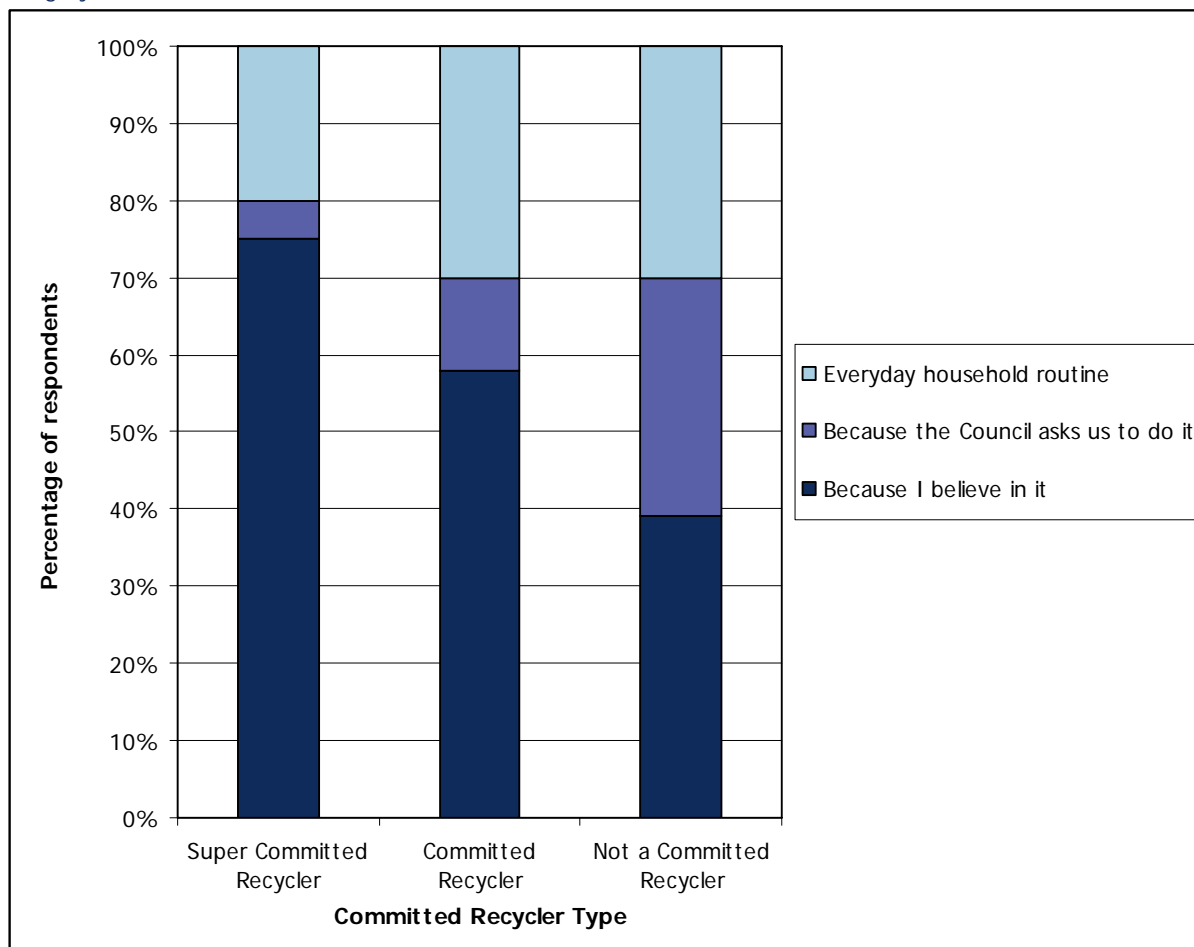
Summing up in this analysis of the motivators that drive people to recycle, respondents were asked if they had to choose one of the three reasons, what one best sums up what makes them recycle – ‘because I believe in it’; because the council asks us to do it’ and ‘because it’s everyday household routine’. From all respondents that stated they recycle, 59% said they participate because they believe in it. Just over a quarter (27%) stated its part of everyday household routine, while around 1 in 7 (14%) take part mainly because the council asks them.

The majority of super-committed recyclers participate because they believe in it (75%) and only 5% do it because the council asks them to. The non committed recyclers reasons is mixed between the three options with the slight majority (39%) participating because they believe in it followed by 31% doing it because the councils ask them to do it.

**Table 6.45:** Overall reason for recycling, grouped by commitment to recycling. Percentages are presented graphically in Figure 6.44

	Super Committed		Committed		Not Committed		Total	
	Count	%	Count	%	Count	%	Count	%
Because I believe in it	337	75%	355	58%	133	39%	825	59%
Because the council asks us to do it	22	5%	70	12%	108	31%	200	14%
Everyday household routine	89	20%	182	30%	103	30%	374	27%
Total	448	100%	607	100%	344	100%	1399	100%

**Figure 6.44:** Overall reason for recycling grouped by commitment to recycling. Numbers of respondents in each category are tabulated in Table 6.45

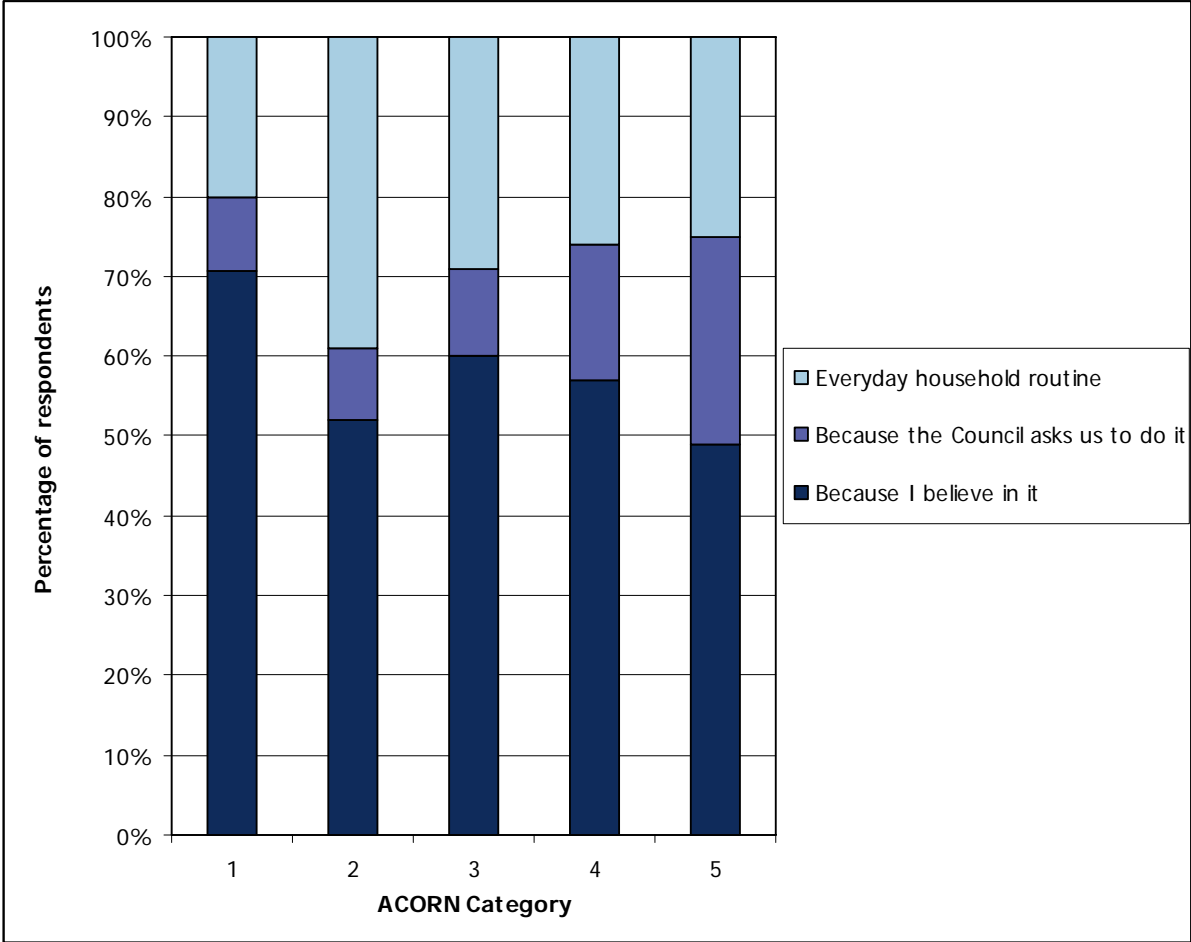


When cross tabulated with ACORN, 70% of category 1 respondents stated they recycle because they believe in it. Just under half (49%) of category 5 respondents recycle for the same reason and over a quarter do it because the council asks them to do it.

**Table 6.46:** Overall reason for recycling grouped by ACORN category. Percentages are presented graphically in Figure 6.45

ACORN												
	1		2		3		4		5		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Because I believe in it	194	70%	43	52%	307	60%	135	57%	129	49%	808	59%
Because the council asks us to do it	26	9%	7	9%	54	11%	39	17%	68	26%	194	14%
Everyday household routine	56	20%	32	39%	150	29%	61	26%	66	25%	365	27%

**Figure 6.45:** Overall reasons for recycling grouped by ACORN category. Numbers of respondents in each category are tabulated in Table 6.46

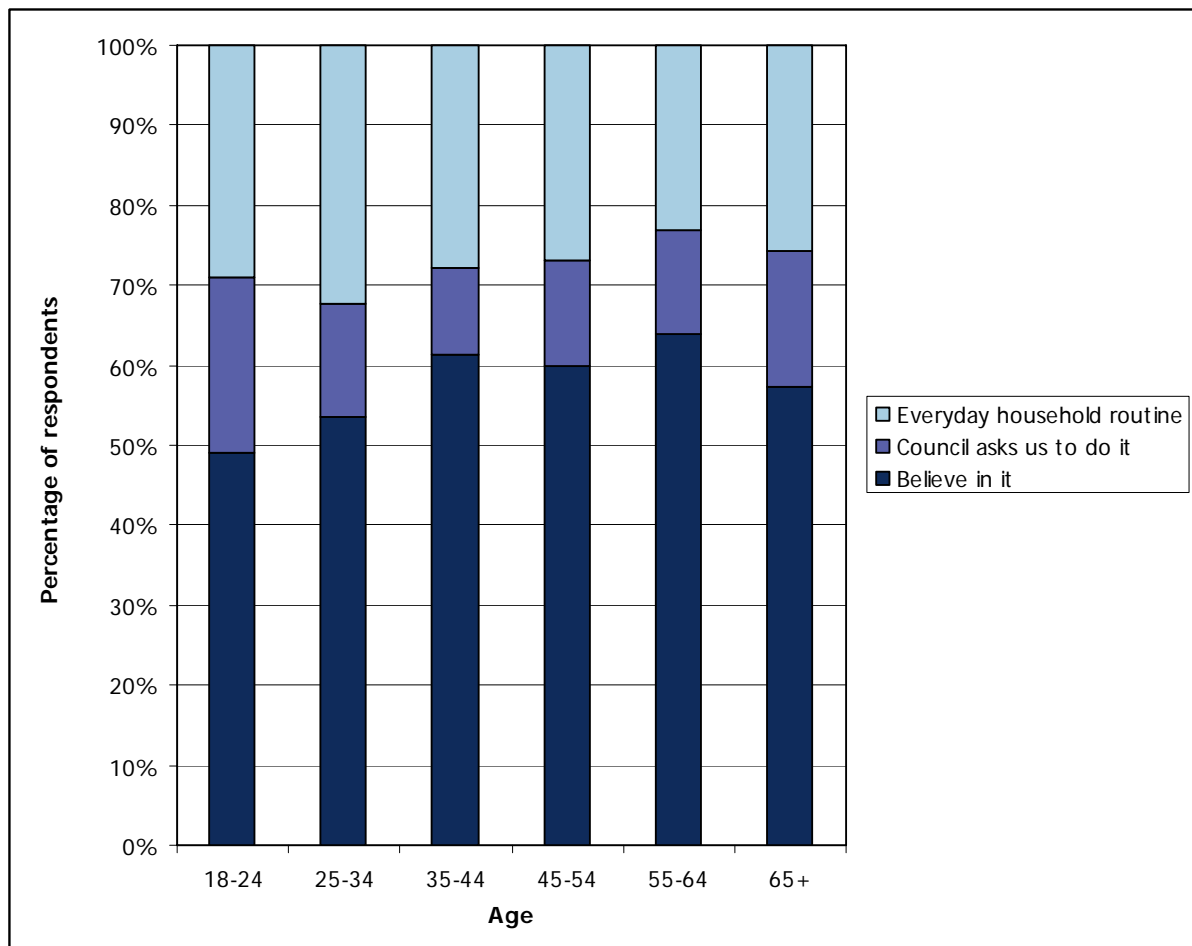


There is not much difference between age groups and reasons for recycling among the recyclers. Fewer 18-24s (49%) recycle because they believe in it than the other age groups and they almost a quarter (22%) recycle because the council ask them to do that that is the most of all age groups.

**Table 6.47:** Overall reason for recycling grouped by age. Percentages are presented graphically in Figure 6.46

	18-24		25-34		35-44		45-54		55-64		65+	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Believe in it	24	49%	89	53%	175	62%	150	60%	144	64%	247	58%
council asks us to do it	11	22%	24	14%	30	11%	33	13%	29	13%	72	17%
Everyday household routine	14	29%	54	32%	79	28%	68	27%	52	23%	109	26%

**Figure 6.46:** Overall reason for recycling, grouped by age. Numbers of respondents in each category are tabulated in Table 6.47



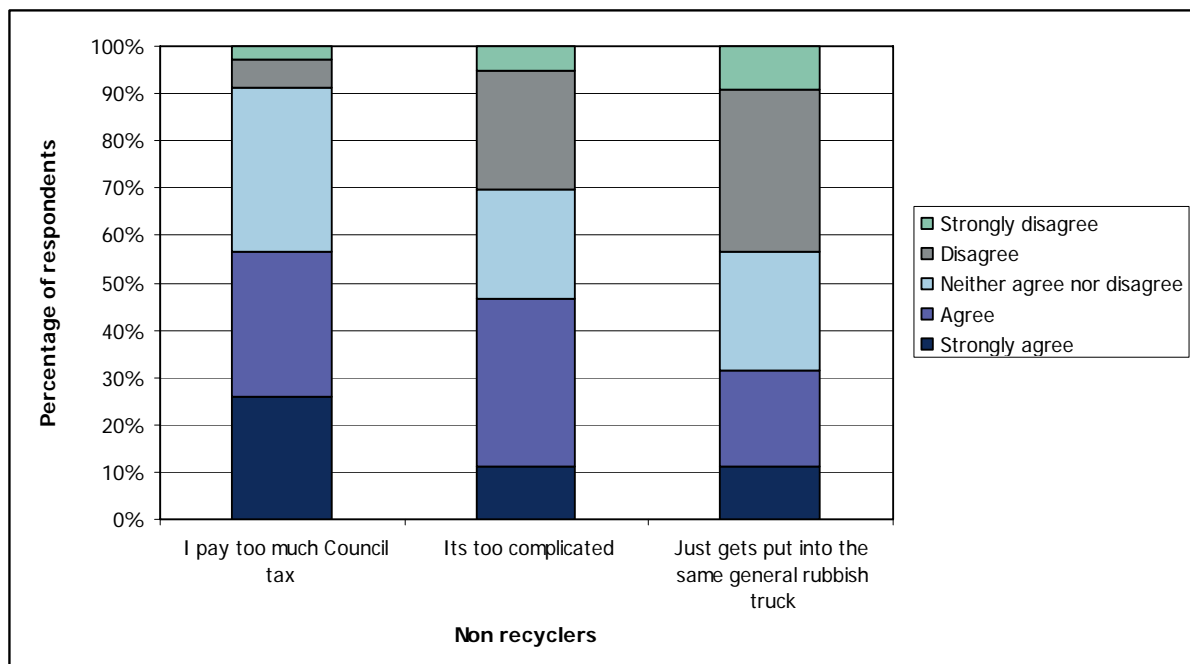
## 6.6 Non recyclers

Non recycling respondents (6% of the total sample in the research) were asked to what extent they agree or disagree with a series of statements. Firstly over half (56%) strongly agreed/agreed that they pay too much council tax to sort their own waste. Just under half of the non recycler strongly agreed/agreed that the council had made recycling too complicated suggesting. Almost one third 32% of non recyclers strongly agreed/agreed that recycling goes with the general rubbish.

**Table 6.48:** Non recycler agreement with belief barriers, percentages are presented graphically in Figure 6.47

		Non-recycler	
		Count	%
I feel like I pay too much council tax to have to sort my own waste	Strongly agree	20	26%
	Agree	24	31%
	Neither agree nor disagree	27	35%
	Disagree	5	6%
	Strongly disagree	2	3%
The council have made the whole recycling business too complicated	Strongly agree	9	11%
	Agree	28	35%
	Neither agree nor disagree	18	23%
	Disagree	20	25%
	Strongly disagree	4	5%
Even when you separate things, a lot of the time the stuff just gets put into the same general rubbish truck	Strongly agree	9	11%
	Agree	16	20%
	Neither agree nor disagree	20	25%
	Disagree	27	34%
	Strongly disagree	7	9%

**Figure 6.47:** Non recycler agreement with belief barriers, number of respondents in each category are tabulated in Table 6.48



## 6.7 Comparison

Table 6.49 compares the comparable overall barriers of recyclers with non recyclers. When asked if they agreed that they paid too much council tax to sort their own waste, slightly more non recyclers (57% compared to 50%) agreed with the statement, however, one third of recycler disagreed compared to just 9% of non recyclers.

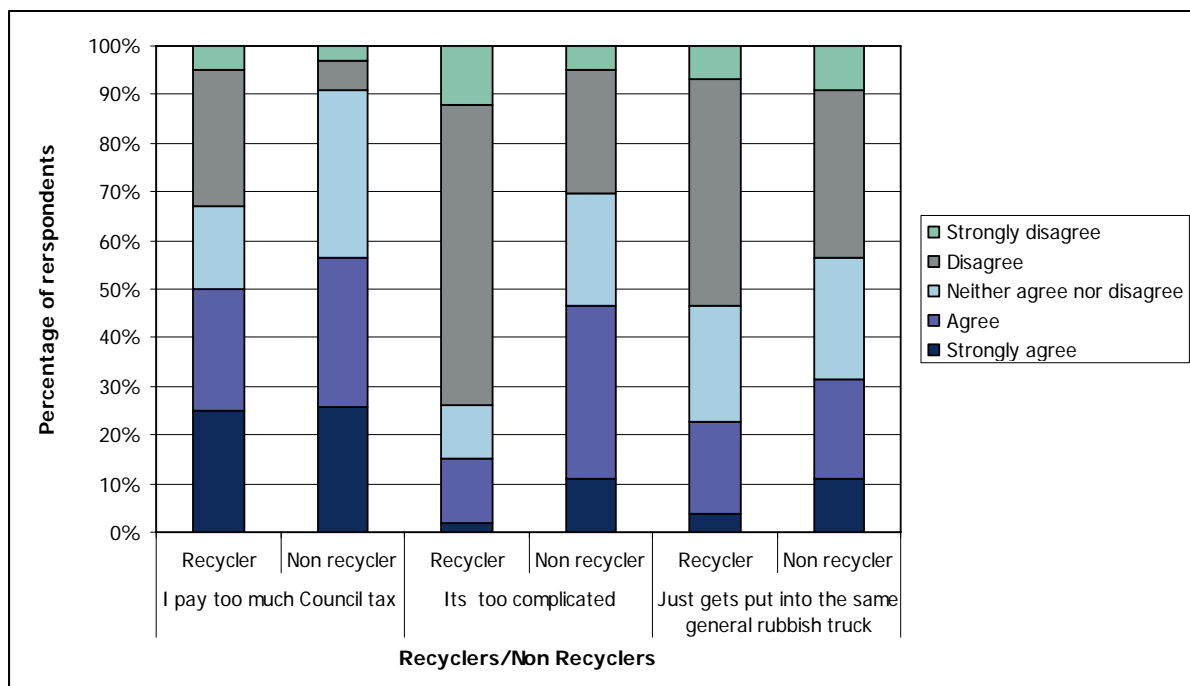
There is a huge difference in opinion when respondents were asked if they thought the council had made recycling too complicated. Three quarters (74%) of recyclers disagreed with this but 30% of non recyclers disagreed. This seems to be the biggest single barrier that differentiates recyclers and non-recyclers.

More recyclers disagreed that the recycling gets put in with the general rubbish than the non recyclers.

**Table 6.49:** Comparison between recyclers and non recyclers, percentages are presented graphically in Figure 6.48

	I pay too much council tax to have to sort my own waste		The council have made recycling too complicated		A lot of the time the stuff gets put into the same general rubbish truck	
	Recycler	Non recycler	Recycler	Non recycler	Recycler	Non recycler
Strongly agree	25%	26%	2%	11%	4%	11%
Agree	25%	31%	13%	35%	19%	20%
Neither agree nor disagree	17%	35%	11%	23%	24%	25%
Disagree	28%	6%	62%	25%	47%	34%
Strongly disagree	5%	3%	12%	5%	7%	9%
Total	100%	100%	100%	100%	100%	100%

**Figure 6.48:** Comparison between recyclers and non recyclers, number of respondents in each category are tabulated in Table 6.49



## 6.8 Summary of findings

The headline findings from the above statistical analysis show that for current recyclers (94% of the sample) there are significant barriers that prevent them recycling as much as they could. For example:

### Situational barriers:

Current recyclers say they would it would recycle a little or a lot more if they had:

- collections of a wider range of materials (52%);
- bigger containers (23%);
- more containers (20%);
- more space to store their container (19%);
- more frequent collections (18%); and
- containers easier to move (16%).

### Behaviour barriers:

Current recyclers nevertheless still sometimes or often:

- bin things because they are not sure if they can be recycled (48%);
- throw recyclable bathroom wastes in the residual bin (41%);
- put things in the recycling even if they're not sure they can be recycled (36%);
- forget to put out the recycling because they are not sure of the collection day (33%);
- bin things because their recycling container is full (21%); and
- bin things rather than cleaning them for recycling (19%).

For most recyclers (95%) recycling has become part of the 'everyday household routine'. However, over half (53% found it harder recycling at Christmas, 16% in the winter generally, and 8% on holiday or in the summer generally, They are also put off a little or a lot by:

- fear of identity theft (16%);
- having to store recyclables (12%); and
- having to clean them (7%).

### Knowledge and understanding:

Less than half the sample as a whole (48%) understood 'very well' what they are supposed to use their recycling containers for. About a third of recyclers said it would increase their recycling if they had better information about their recycling services. Some recyclers also said that council information had not helped them:

- understand their local recycling scheme as a whole (21%);
- understand the real benefits of recycling (12%);
- knowing what can and can't be recycled (12%); and
- knowing when the collection service operates (5%).

### Attitudes and motivators:

The vast majority of recyclers (90%), say they are 'happy to be doing their bit for the environment' and 69% say they feel 'good about themselves' when recycling. However 29% feel they are just 'doing it because the council is telling us' and 17% 'do it because everyone else is doing it'.

Recyclers would still be encouraged to recycle more by:

- seeing the practical impact of recycling in their local area (86%);
- feeling more appreciated by the council (52%);
- receiving an incentive for recycling (56%); and
- being fined for not recycling (34%).

Overall if asked which of three reasons best sums up why they recycle, 59% said 'because they believe in it', 27% say 'it's part of the everyday household routine, and 14% 'because the council asks them to do it'.

For declared non-recyclers (only 6% of the sample) their main reasons for not recycling at all were that is easier to throw everything in the bin (46%), not seen any information about recycling (44%), not knowing what can and can't be recycled (32%), and having nowhere to store recyclables (also 32%).

## 7.0 Seven Stages to the Complete Recycler – A Framework for Action on Behaviour Change

The research has led to some important fresh thinking about the population segments that might be targeted for recycling promotional and communications campaigns especially at more local levels. It has also clarified that four very different types of barrier exist:

- situational barriers including not having adequate containers, a lack of space for storage, unreliable collections, unable to get to bring sites;
- behaviour for example household disorganisation, being too busy with other preoccupations, difficulties in establishing routines for sorting waste and remembering to put it out;
- lack of knowledge such as knowing what materials to put in which container, and understanding the basics of how the scheme works; and
- attitudes and perceptions such as not accepting there is an environmental or other benefit, resistant to householder sorting and not getting a personal motivational reward from recycling.

Very different messages and operational actions are needed to respond to these barriers. Local authorities need to understand the prevalent barriers amongst the sub-groups in their population and develop interventions appropriate to the prevalent barriers. Some interventions will be operational (service improvement) others about information and practical advice about how to use the scheme, and others motivational, showing why participation is worthwhile. For actions to be taken to overcome the barriers, a clear analysis of the prevalent barriers is required.

From this evidence, and drawing on the competences model set out in Section 3, we have proposed that initiatives to overcome barriers to recycling should be approached with consideration of 'seven levels of recycling competence', shown in Table 7.1 below. This simple model of recycling competence sets out a whole spectrum of competence, ranging from Level 1 (unconscious incompetent, where recycling is simply 'not on people's radar') through intermediate levels where people are struggling to do what is required, to the highest Level 7; a state of ideal competence summed up as the perfect or 'complete' recycler. Efforts to move people up from level to level, towards ever higher degrees of competence, involve helping overcome the barriers that lie between the different levels. These barriers may be situational, behavioural, knowledge or attitudinal, at any level, as the full research report sets out.

Table 7.1 also shows the extent to which the majority of the public, who now qualify as 'committed recyclers', still face barriers that prevent them recycling more things more often. The research summarised here shows clearly that it would be wrong to think that getting people to be 'committed recyclers' equates to a job done. The committed recycler group remains a fruitful target for initiatives that further remove barriers to more recycling. Indeed, this sector of the population may produce greater yield, in terms of increased waste diversion per unit of promotional effort than spending the equivalent resources on the relatively small minority of current non-recyclers.

**Table 7.1:** WRAP recycling competence levels, relationship to 'committed recycler' status, and links to Defra pro environmental behaviour segments. Recycling rate in column 1 is an indication of the likely proportion of the household's recyclable waste that they actually recycle at a given competence level.

Recycling rate	Recycling Competence level (1 to 7)	Description	WRAP Committed recycler status	Population %		7. Honestly Disengaged	6. Stalled Starters	5. Cautious participants	4. Sideline supporters	3. Concerned consumers	2. Waste watchers	1. Positive greens
0%	1. Recycling unaware	Just not on their radar, no idea about it at all	Non recycler	}	6%	✓	✓					
0%	2. Aware but inactive	Knows about it but have not seriously contemplated doing it	Non recycler			✓	✓					
Sporadic	3. Contemplated but not engaged	May have dabbled, possibly elsewhere, may do occasionally, drifted back	Recycler but not 'committed'	}	23%		✓	✓				
A little	4. Unreliable	Recycle but sometimes forget, sometimes miss out, recycle opportunistically not regularly	Recycler but probably not 'committed'							✓	✓	✓
A fair amount	5. Trying their best	Usually take part, recycle 'staple' items like newspapers but confused about other items	Committed recycler	}	41%				✓	✓		
A lot	6. Broadly competent	Reliable and regular but may still miss out some materials or collections	Super-committed recycler								✓	✓
100%	7. The complete recycler	Recycle all available items of all recyclable materials all of the time	Super-committed recycler	}	30%						✓	✓

## Links with Defra's environmental behaviour segments

Defra has recently published a major review of pro-environmental behaviours (Defra, 2008) and has set out a broad cross-cutting strategic framework for developing pro-environmental behaviours. The Defra research is shaped around seven population segments broadly ranked according to their ability and willingness to change towards more pro-environmental behaviours such as eating more local and seasonal foods, installing home energy insulation and increasing recycling. The specific research reported here on barriers to recycling at home, can be seen as focussing on a detailed sub-element of Defra's wider framework. For this reason we have looked at the extent to which the seven recycler competence levels produced in this project, map onto Defra's seven environmental behaviour segments.

Table 7.1 shows how the two classifications map across to each other. It can be seen that the WRAP recycling competence levels tend to relate to specific sub-groups of Defra pro-environmental behaviour segments, a finding which demonstrates the complementary nature of the two approaches.

- Working our way up the recycler competence levels, the Defra 'Honestly disengaged' segment are people that make no alterations to their life to help the environment and these can be linked broadly to competence levels 1 and 2 established in this research, firstly, the 'Recycling unaware' who have no idea about it at all and also 'Aware but inactive' who know about recycling but do not contemplate doing it.
- The 'Stalled starters' from the Defra framework are broadly those who do not know too much about climate change. This can be linked to those that fall within the 'recycling unaware' competence level 1 (not on their radar) and also 2 and 3.
- The 'Cautious participants' carry out some pro environmental actions and are similar to the 'contemplated but not engaged category' in this barriers research as they may have dabbled in recycling and may still occasionally recycle.
- Defra's 'Sideline supporters' who forget to carry out pro environmental actions can be linked to the 'Unreliable' competence level from the barriers to recycling who also tend to forget to recycle sometimes.
- The 'Concerned consumers' segmentation feel they do more for the environment than others and that can be linked to the 'Try their best' recycling competence level 5, who are people who recycle the staple items such as newspapers.
- The 'Waste watchers' from the Defra segmentation are those who feel they should think about what they are doing and using during life that can be linked to both the 'Broadly competent' level 6 who are reliable recyclers and 'The complete recycler' level 7 who recycle all available items.
- Finally Defra's 'Positive greens', who do as much as they can to limit any impact on the environment, are clearly linked to the 'The complete recycler' competence level 7 from this research.

In summary, although these two classification schemes have been developed independently, and the recycling competence levels have been constructed specifically and only around research evidence on barriers to recycling at home, it is clear that the two behaviour sets map well to each other.

There are two implications from this. Firstly, those broader strategic actions taken nationally (in line with the Defra framework) are also likely to connect relatively well to people at the respective recycling competence level shown in Table 7.1. Secondly, the initiatives proposed here for moving people successively up the steps in the recycling competence ladder, could also generate positive secondary environmental benefits (e.g., in energy reduction) at the broader scale of the Defra work.

Both the Defra document (Defra, 2008) and the new WRAP Business Plan (2008-2011) emphasise the need to generate mutual synergy between the delivery partners in this field, and the research reported here gives positive evidence of a practical context in which these benefits might be achieved.

## Competence levels and recycling communications messages

Based on the findings of the research, we have summarised the typical profile of consumers at the seven competence levels, and the different kinds of communications messages that might be relevant if targeted at people in each of the basic seven stages of recycling competence. See Table 7.2 below.

**Table 7.2:** Summary of consumer profiles for each of the seven stages of recycling competence

Recycling Competence Level (1 to 7)	Description	Profile – tend towards having one or more of the characteristics below	Main messages and actions (see Figure 2)
1. Recycling unaware	Just not on their radar, no idea about it at all	<b>ACORN:</b> 2, 4 <b>Age:</b> 18-24 <b>Property:</b> Flats, terrace, maisonette <b>Lifecycle:</b> Young single, no kids yet; single parent	a), b), c)
2. Aware but inactive	Know about it but have not seriously contemplated doing it	<b>ACORN:</b> 2, 4 <b>Age:</b> 18-34 <b>Property:</b> Flats, terrace, maisonette <b>Lifecycle:</b> Young single, no kids yet; single parent	a), b), c), d)
3. Contemplated but not engaged	May have dabbled, possibly elsewhere, may do occasionally, drifted back	<b>ACORN:</b> 2, 4, 5 <b>Age:</b> 18-34 <b>Property:</b> Terrace, bungalow <b>Lifecycle:</b> Solitary retiree, single parent	a), b), c), d), f)
4. Unreliable	Recycle but sometimes forget, sometimes miss out, recycle opportunistically not regularly	<b>ACORN:</b> 3, 5 <b>Age:</b> 35-54 <b>Property:</b> Bungalow, terrace, semi- <b>Lifecycle:</b> Solitary retiree, solitary adult worker	a), b), c), d), e), f)
5. Trying their best	Usually take part, recycle 'staple' items but confused about other items	<b>ACORN:</b> 3, 5, 2 <b>Age:</b> 35-54 <b>Property:</b> Semi-detached, bungalow <b>Lifecycle:</b> Full nest couple with kids, solitary retiree	a), c), d), e), f)
6. Broadly competent	Reliable and regular but may still miss out some materials or collections	<b>ACORN:</b> 1, 2 <b>Age:</b> 55 and above <b>Property:</b> Detached, semi-detached <b>Lifecycle:</b> Empty nest, couple with no kids	a), c), d), e), f)
7. 'The Complete Recycler'	Recycle all available items of all recyclable materials all of the time	<b>ACORN:</b> 1 <b>Age:</b> 55-64 <b>Property:</b> Detached <b>Lifecycle:</b> Empty nest, children living elsewhere	a), d), e), f)

The following section, and Figure 7.1 at the end of this Section, shows in more detail the links between recycling competence levels, messages and communication methods. Using the competence levels arising from this

research, the messages are developed to respond to the barriers identified in the qualitative research, and the communications methods, suitable for the delivery of the messages, are shown in the body of the chart. The shaded areas give an indication of the relevance of the messages across the various competence levels.

Before explaining the barrier – message links in detail, it is important to bear in mind that this research has shown that good communications and behaviour motivation cannot overcome the barriers simply caused by poor facilities and poor service standards.

- It is important to understand that only by addressing the negative situational barriers will recycling become habitual, in particular amongst the lower competence levels. It is also critical that services are provided efficiently and that requests and complaints are dealt with promptly. Any failure of service, or inadequate provision of services, provides people with an excuse for not recycling.
- Consideration must be given to the type of service provided; there is a world of difference between a multi-bin kerbside scheme in a suburban area and that provided to high rise city centre tenanted flats – in all cases it must be relevant, appropriate and easy to use.
- Communication in itself cannot and will not cause behavioural change by persuading people to use recycling services which are difficult to use, inappropriate or badly run. After all, where there is a choice, no householder will continue to purchase bad products or services however good the promotion.

## Competence levels, messages and methods

Different messages and methods of communication are needed for different levels of competence but these overlap and it would be wrong to assume there will ever be a single 'silver bullet' message for any one competence level. For example, the recycling unaware must have the concept of recycling and its benefits explained to them but it would be a missed opportunity if they were not told where and how they can recycle.

It is also highly unlikely, that within any targeted geographical area, the level of competence will be exactly the same for all households and unless highly sophisticated identification methods are used, messages encompassing a number of competence levels will have to be developed.

The following section explains the messages a) to f) referenced in Table 7.2 and associated communications methods most likely to be effective in communicating with households at the different competence levels. These targeted communications methods are in addition to the continuing basic universal communications requirements - ensuring that helpline and front-line staff are fully engaged, the council website is up to date and easy to use, and that all council members and staff are aware of the council's recycling and waste collection services.

### Instructions – Basic how-to 'user guide' information (Message a)

Explaining what services are available and how they should be used are messages which must be treated as a situational issue and part of service delivery. All householders, at whatever competence level must be provided with instructions on how to use the service; there should be no reason why this information is not easily available.

Communication methods should be predominantly direct mail and other material which will provide a permanent reminder in the home.

### Explanations - What is recycling? (Message b)

'What is recycling' messages and their benefits focus on competence levels 1 – 4. The more 'intense' methods of communication such as door knocking and local events should be focused on areas where categories 1 and 2 are concentrated, coupled with outdoor advertising in the local area to raise awareness of recycling.

This messaging should clearly link with national newspaper and television advertising to develop a coherent and recognisable campaign with the aim of creating behavioural change.

## Dispelling the myths - education and information (Message c)

Messages to dispel recycling myths and increase understanding should be focused around competence level 4. There are many myths about recycling and a lack of understanding around why recycling is a good thing and waste disposal to landfill is harmful. The lack of understanding can relate to simple operational issues or more complex issues such as the relationship between sending putrescible material to landfill and climate change. Messages should be tailored to suit the competence levels being targeted.

These messages should be provided in newsletters and council newspapers which reach all households. Strong PR should also be employed to get local press on-side.

## How it works - What actually happens to the recyclables (Message d)

Many committed recyclers seem to take a blind leap of faith as to what happens to the material they put out for recycling. This should not be the case and appropriate messages should be put out to explain where their recyclables are made into new products.

The communication method can range from well developed lorry livery and newsletters explaining where the locally recycled materials are reprocessed and what local products are made from them (such as local park benches made from recycled plastics), through to national television promotion informing householders of the national picture.

## Rewards - Feedback and thanks (Message e)

All committed recyclers (competence levels 5 – 7) need to know how well they are recycling and how their district and the UK compares to other parts of the country and Europe. They also need to be thanked for participating in the council collection schemes, to reinforce motivation and prevent people flagging through lack of appreciation for their efforts.

Some limited feedback and thanks should be provided in instructional leaflets such as the annual collection calendar. More detailed information should be provided in newsletters and council newspapers which reach all households, and Household Recycling Centre signage. Strong PR should also be employed to reinforce this message with practical local 'human interest' stories commending people and groups who have achieved high recycling performance.

## Saving cash – Cost effectiveness of recycling (Message f)

The 'cost effectiveness of recycling' message applies perhaps more to the committed recyclers but also has a significant relevance to the less competent recyclers. The competent recyclers want to understand the cost and financial benefits of recycling, less competent recyclers should be made more aware of the cost of recycling and the reduction in the local authority income stream if they do not recycle. There could be a simple local 'cost benefit statement' highlighting the equivalent value of recycling – for example that the costs saved equate to 'x new litter bins' in the area. Myths emerging that councils profiteer from collecting recyclables should also be actively dispelled through effective and swift media rebuttal.

Information should be provided in newsletters and council newspapers which reach all households. Strong PR should also be employed to drive the message home of cost of services and income streams from recyclates. Messages should also be employed in door knocking exercises when addressing householders with lower competence levels.

Figure 7.1: Relevance of each communications message and media, to people at each Recycling Competence Level

Recycling Competence Level (1 to 7)	Message Description	a. Instructional - What, When and How to recycle. Details of Services and how to use them	b. What is recycling? Why is the council asking you to do it? What are the benefits to individuals & environment	c. Dispelling the myths - education. What is good and bad in recycling and waste disposal.	d. What happens to the recyclables that are collected	e. Feedback and thanks - How our district is doing compared to the rest of the UK and Europe.	f. What is the cost of recycling, the cost of waste disposal and LATS fines/allowances
1. Recycling unaware	Just not on their radar, no idea about it at all	<b>Communications methods:</b> <ul style="list-style-type: none"> <li>• Instructional leaflets</li> <li>• Collection calendars</li> <li>• Bin/box stickers</li> <li>• Contamination tags</li> </ul>					
2. Aware but inactive	Know about it but have not seriously contemplated doing it		<b>Communications methods:</b> <ul style="list-style-type: none"> <li>• Door knocking with leaflets</li> <li>• Targeted local displays/events</li> <li>• TV and local radio advertising</li> <li>• Local and national newspapers</li> <li>• Outdoor advertising</li> </ul>				
3. Contemplated but not engaged	May have dabbled, possibly elsewhere, may do occasionally, drifted back						
4. Unreliable	Recycle but sometimes forget, sometimes miss out, recycle opportunistically not regularly			<b>Communications methods:</b> <ul style="list-style-type: none"> <li>• Leaflets</li> <li>• Newsletters</li> <li>• PR</li> <li>• Council newspaper</li> <li>• Local press</li> <li>• National TV documentaries</li> </ul>			
5. Trying their best	Usually take part, recycle 'staple' items but confused about other items				<b>Communications methods:</b> <ul style="list-style-type: none"> <li>• Vehicle livery</li> <li>• PR</li> <li>• Newsletters</li> <li>• Council newspaper</li> <li>• Advertorials</li> <li>• Events/displays</li> </ul>		
6. Broadly competent	Reliable and regular but may still miss out some materials or collections					<b>Communications methods:</b> <ul style="list-style-type: none"> <li>• PR</li> <li>• Newsletters</li> <li>• Council newspaper</li> <li>• Advertorials</li> <li>• Events/displays</li> </ul>	
7. 'The Complete Recycler'	Recycle all available items of all recyclable materials all of the time						<b>Communications methods:</b> <ul style="list-style-type: none"> <li>• PR</li> <li>• Newsletters</li> <li>• Council newspaper</li> <li>• Advertorials</li> </ul>

## 8.0 Conclusions and Recommendations

- This research has shown the need for customisation and targeting of recycling promotional messages so that they link better to the different barriers faced by different segments of the population.
- Barriers can be usefully divided into situational, behavioural, cognitive and attitudinal. Promotional communications initiatives can address the latter three barriers but should not be applied in isolation from steps to make the practical (situational) environment conducive to recycling.
- People's journey along the road to becoming the ideal or 'complete' recycler involves them in a 'learning and competence' process.
- Helping people along this journey involves targeting messages that assist people in making that step up to the next level of competence.
- WRAP's committed recycler metric is useful in highlighting the barriers faced by non-recyclers and recyclers not yet reaching the 'committed recycler' status.
- However, it has also highlighted the barriers that nevertheless remain within the committed recycler group. Committed recyclers can still progress and recycle more things more often.
- We have proposed sub-dividing committed recyclers into standard committed and super-committed, so that the different forms of barrier relating to these two sub-groups can be more effectively targeted.
- It is evident that even amongst super-committed recyclers, there are still around a fifth who believe they could recycle more things more often.
- We have outlined the types of people commonly found at the different levels of competence, and the types of messages and communications media most suited to supporting people in making that next step up.

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# Appendix A: ACORN Categories

ACORN stands for 'A Classification of Residential Neighbourhoods' and is a three-tier taxonomic classification scheme developed by the consumer research agency CACI. The table below shows a simple verbal description for the five principal ACORN Categories 1 to 5, and the 17 subsidiary ACORN Groups organised within the five primary Categories.

ACORN Categories	ACORN Groups
1 - Affluent Achievers	1.A - Wealthy Executives 1.B - Affluent Greys 1.C - Flourishing Families
2 - Urban Prosperity	2.D - Prosperous Professionals 2.E - Educated Urbanites 2.F - Aspiring Singles
3 - Comfortably Off	3.G - Starting Out 3.H - Secure Families 3.I - Settled Suburbia 3.J - Prudent Pensioners
4 - Modest Means	4.K - Asian Communities 4.L - Post Industrial Families 4.M - Blue Collar Roots
5 - Hard Pressed	5.N - Struggling Families 5.O - Burdened Singles 5.P - High Rise Hardship 5.Q - Inner City Adversity

# Appendix B: Marked-up Questionnaire used in the Quantitative Fieldwork

WRAP (Waste & Resources Action Programme)

Barriers to Recycling At Home Survey 2008

Interviewer Name \_\_\_\_\_

Date of Interview \_\_\_\_\_ Time \_\_\_\_\_

Full Address \_\_\_\_\_

\_\_\_\_\_ Postcode \_\_\_\_\_

Local authority \_\_\_\_\_ Sub-area \_\_\_\_\_

Good morning/afternoon, my name is \_\_\_\_\_ and I work for M-E-L Research. We're running a survey about the difficulties people have in recycling all the things the council asks you to. It's on behalf of the organisation that runs Recycle Now – you may have seen their adverts on TV at the moment to get us recycling more things more often. Can you spare a few minutes to give us your views?

**No need to read out unless asked** (Recycle Now is run by WRAP (Waste and Resources Action Programme). WRAP works in partnership to encourage and enable businesses and consumers to be more efficient in their use of materials and recycle more things more often. This helps to minimise landfill, reduce carbon emissions and improve our environment.)

The aim of the survey is to help Recycle Now make recycling easier for everyone. Your response will be completely confidential and will not be used for any purpose other than this survey. Information from the survey may be used by WRAP to develop recycling services and inform the 'Recycle Now' campaign.

Qualifying Question

Can I just check, are you the person solely or jointly responsible for deciding what to do with the household's waste?

Yes	<input type="checkbox"/>	Go to Q1
No	<input type="checkbox"/>	Ask to speak to decision maker. If they are not available then end questionnaire.

## Section A: Recycling collection service

Firstly, I would just like to ask briefly about the Council's waste and recycling collection services in your area.

**Q1** Are you aware of the service the Council runs in your area, where they come round regularly and collect recyclable waste from households?

Tick ONE only

Yes	98.6%	Go to Q2
No	1.4%	Go to Q8

**Q2** So, how often does your local Council collect your recyclable waste, and your normal rubbish bin waste?

Tick ONE only

Weekly normal bin collection and fortnightly recycling collection	34.0%
Weekly normal bin collection and weekly recycling collection	30.3%
Fortnightly normal bin collection and fortnightly recycling collection (alternate weeks)	32.6%
Not sure	3.2%
Other	0.0%

**Q3** Thinking of the Council's household recycling collections, what sort of containers does your own household have at the moment from the Council, to put your recyclable waste in?

Tick ALL that apply

Box (probe and write number)		Go to Q4
Bag (probe and write number)		Go to Q4
Recycling bin (probe and write number)		Go to Q4
Communal Recycling Bin		Go to Q5
I don't currently have a recycling container		Go to Q6

**Q4** Whereabouts in the house do you keep your recycling containers?

Tick ALL that apply

Kitchen	5.4%
Utility room	2.9%
Indoors cupboard	1.6%
Garden	59.7%
Porch	4.9%
Garage	13.8%
Shed	3.8%
Other (please specify)	18.7%

**Q5** Thinking generally, how well would you say you understand what you are supposed to use your recycling containers for?

Tick ONE only

Very well	47.5%
Fairly well	48.3%
Not very well	3.3%
Not very well at all	0.9%

NOW GO TO Q8

**Q6** Why doesn't your household have a container for the recycling service?

Tick ONE only

I have lost it	6.3%
It was stolen or not returned after use	20.0%
The council didn't give me one	57.5%
I'm using my recycling container for other purposes	0.0%
None there when we moved into the house	8.8%
Other (please specify)	7.5%

**Q7** Do you know how to go about getting another recycling container?

Tick ONE only

Yes	35.4%
No	64.6%

### Section B: Committed Recycler Section

**Q8** When thinking about recycling of household waste, which of these statements best describes how important recycling is to you personally?

Tick ONE only

Very important	49.9%
Fairly important	44.7%
Not very important	3.2%
Not at all important	1.2%
Don't know	1.0%

**Q9** Which of these statements best describes your attitude to recycling?

Tick ONE only

I recycle even if it requires additional effort	73.9%	Go to Q10
I recycle if it does not require additional effort	20.5%	Go to Q10
I do not recycle	5.4%	Go to Q34
Don't know	0.1%	Go to Q10

**Q10** Thinking about how convenient it is for you personally to recycle your household waste would you say it is.....?

Tick ONE only

Very convenient	31.9%
Fairly convenient	56.8%
Not very convenient	9.5%
Not at all convenient	1.6%
Don't know	0.2%

**Q11** Which of these statements best describes how much you recycle?

Tick ONE only

I recycle everything that can be recycled	52.2%	Go to Q12
I recycle a lot but not everything that can be recycled	42.3%	Go to Q12
I recycle sometimes	5.3%	Go to Q12
I do not recycle	0.1%	Go to Q34
Don't know	0.0%	Go to Q12

### Section C: Container and Collection Barriers

The next section of the survey is about the Council's kerbside recycling collection scheme, where they come round and collect the recycling. People often find it quite hard to recycle all the types of waste they could. The next set of questions is about ways to make it easier for people to recycle as much of their waste as possible.

**Q12** Would any of the following make it easier for you to recycle **more** things **more** often? **[PROBE FOR EACH]** How much difference would it make, to the amount of recycling you do? **SHOWCARD 1**

Tick ONE for each statement

	A lot	A little	Not much at all	Not sure / Don't know
Better information about existing services such as the collection days and times	9.6%	24.8%	65.3%	0.2%
Having a more frequent collection service	17.9%	14.6%	67.3%	0.2%
If the Council collected a wider range of materials	51.6%	23.9%	24.1%	0.5%
If I could get physical help putting the recycling containers out ready for collection	5.5%	9.4%	85.1%	0.0%

**Q13** And now thinking about the existing container(s) you have for recycling... would any of the following make it easier for you to recycle **more** things **more** often? **[PROBE FOR EACH]** How much difference would it make, to the amount of recycling you do? **SHOWCARD 2**

Tick ONE for each statement

	A lot	A little	Not much at all	Not sure / Don't know
Understanding more about <u>what you should and shouldn't put</u> in the recycling container	15.3%	28.0%	56.4%	0.2%
Having <u>more</u> recycling containers	20.2%	14.6%	65.0%	0.2%
Having <u>bigger</u> recycling containers	22.6%	13.2%	63.9%	0.4%
Recycling containers that are easier to move	15.6%	19.1%	65.0%	0.3%
More space around the house to store the recycling containers	18.6%	25.3%	55.5%	0.6%

**Q14** Are you aware of who to contact if you run short of, or lose, your recycling containers?

Tick ONE only

Yes I know who to contact	69.2%
No I don't know who to contact but would like to know	29.3%
No I don't know who to contact and I am not interested in knowing	1.4%

## Section D: Understanding the practical requirements

Now we're going to move on to look at the practical problems in taking part in recycling.

**Q15** Do any of the following put you off recycling as much as you could? **[PROBE FOR EACH]** How much does this put you off recycling as much as you could? **SHOWCARD 3**

Tick ONE only for each statement

	A lot	A little	Not much at all	Not sure / Don't know
Having to clean dirty materials before they can be recycled	7.2%	21.7%	70.8%	0.2%
Having to clean smelly items before they can be recycled	7.7%	21.0%	71.1%	0.3%
Being worried about cutting myself on tins and broken glass	6.8%	17.6%	75.2%	0.4%
Being worried about identity theft from recycling financial documents	15.8%	13.1%	70.2%	0.8%
Having to store materials until they are collected	11.7%	30.8%	57.3%	0.2%

Now I would like to ask you some questions about the information you have received from the Council about recycling, and whether it has helped you to properly understand your local recycling scheme.

**Q16** To what extent do you agree or disagree that the Council's information has helped you to understand the following?

Tick ONE only for each statement

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Not had
Knowing what can and can't be recycled	17.8%	61.4%	8.1 %	9.3%	2.3%	1.1%
Knowing when your recycling containers will be collected	31.0%	58.8%	4.8%	3.3%	1.2%	0.9%
Understanding the real benefits of recycling	15.4%	60.1%	11.0%	10.4%	2.0%	1.0%
Understanding your local recycling scheme overall	9.9%	52.9%	15.7%	17.0%	3.3%	1.2%

**Q17** Apart from what the Council have told you, have you received information about recycling from any of the following places? **[FOR EACH, IF YES]** Has this information encouraged you to recycle more? **SHOWCARD 4**

Tick ALL that apply for a) and b)

Source of information	a) Got information from	b) Encouraged me to recycle
Children's Schools	20.2%	21.3%
Work	20.3%	20.2%
Internet	15.4%	13.1%
Media	60.6%	61.5%
Friends/Family	36.6%	38.7%
Other (please specify below)	22.3%	13.5%

### Section E: Household Organisation

**Q18** To what extent do you agree or disagree with the following statements?

Tick ONE only for each statement

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Recycling is now part of our regular household routine	40.6%	54.1%	2.5%	2.4%	0.4%
There is one person responsible for recycling in my household	23.1%	27.3%	3.0%	33.2%	13.3%
We use the recycling containers at supermarkets/council sites, as part of our household routine	20.3%	36.7%	3.8%	27.3%	11.8%

**Q19** Most people find there are times when they don't recycle things they could. I'm going to run through a few of the problems, and in each case can you tell me how often this happens to you? Firstly, how often do you...  
[ROTATING PROMPT]

Tick ONE only for each statement

	Never	Sometimes	Often
...forget to put the recycling out because you are not sure of the collection date	66.6%	30.8%	2.5%
...throw things in the normal bin because you are not sure if they can be recycled	52.1%	41.1%	6.7%
...throw recyclable materials from the bathroom (like plastic bottles) in normal bin	58.7%	22.6%	18.7%
...throw things in the normal bin if your recycling container is full	80.6%	15.8%	3.6%
...throw dirty recyclable materials in the normal bin rather than cleaning them out	81.2%	15.8%	3.0%
...throw things in the normal bin because you don't want to go outside to use the recycling container	90.7%	7.6%	1.7%
...put things in the recycling containers even though you're not sure if they can be recycled	64.5%	32.5%	3.0%

**Q20** Are there any times of year when you find it harder than usual to recycle as much as you would like?  
**[PROBE]** For example at ....

Tick ALL that apply

Christmas?	52.8%
Easter or other festival times?	6.1%
School or university Holidays?	2.6%
While you're away on holidays?	8.0%
During weekends?	1.4%
In the summer generally?	7.7%
In the winter generally?	15.5%
Other (please specify below)	24.7%

**Q21** [PROBE IF ANY OF THE ABOVE] Why do you find it harder to recycle at these times?

Write in below

Now, I would like to move on, to ask you a few questions about taking waste to the recycling sites and containers at places like supermarkets, street corners and the Council tip sites.

**Q22** Do you ever take recyclable waste to these local sites to be recycled?

Tick ANY that apply

Yes I take materials to be recycled that <u>aren't</u> collected by the Council's household recycling collection scheme	61.3%	Go to Q23
Yes I take materials to be recycled that <u>are also</u> collected by the Council's household recycling collection scheme	30.3%	Go to Q23
Do not use recycling sites	36.2%	Go to Q24

**Q23** Are you ever put off using these recycling sites because of the following? [PROBE] So how often does this put you off using these sites? **SHOWCARD 5**

Tick ONE only for each statement

	Never	Occasionally	Sometimes	Always
Not having suitable transport to take materials to the recycling sites	86.6%	8.1%	4.5%	0.8%
Its easier to throw things in the normal bin	79.8%	12.2%	6.8%	1.1%
The nearest recycling sites are not convenient to get to	82.6%	9.9%	4.6 %	2.9%
The recycling sites are always full to over flowing when I go there	59.2%	19.0%	16.5%	5.3%
Some items are too heavy to take to the recycling sites	72.5%	18.3%	8.6%	0.7%
The queues at the site are too long	59.7%	20.3%	16.9%	3.1 %
The recycling sites are unhygienic	78.7%	11.9%	6.1%	3.3%

**Q24** Why don't you take materials to be recycled at your local recycling sites?

Tick ALL that apply

No transport to take materials to the recycling sites	21.5%
Don't know where my nearest recycling site is	5.0%
Don't know what I can recycle at the recycling sites	3.0%
All my recyclable rubbish is collected by the Council	51.5%
My nearest recycling site is too far away	2.3%
Other (please specify)	24.7%

**Section F: Attitudes/Values**

The next few questions about your views generally, towards recycling.

**Q25** How does it make you feel, when you take part in recycling? Would you agree or disagree that recycling makes you feel ..... [ROTATE]

Tick ONE only for each statement

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
...happy to be doing my bit for the environment	37.9%	51.8%	6.2%	3.9%	0.2%
...like a better citizen	20.8%	46.8%	20.1%	12.1%	0.1%
...pleased to be setting a good example to others	19.9%	50.0%	17.2%	12.1%	0.7 %
...generally good about myself	17.8%	51.4%	19.2%	10.9%	0.7%
...makes me feel part of the local community	17.0%	51.9%	15.8%	13.4%	1.8%

**Q26** And would you agree or disagree that recycling makes you feel ..... [ROTATE]

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I just have to because the council is telling me to	5.7%	23.8%	12.0%	47.7%	10.8%
I am being made to do something I don't want to do	1.5%	4.4%	4.8%	61.5%	27.9 %
I am only recycling because everyone else is doing it	1.5%	15.2%	9.2%	50.6%	23.4%

**Q27** And how does it make you feel when you don't recycle something you could? Would you agree or disagree that not recycling things makes you feel ..... [ROTATE]

When I don't recycle I feel:	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
...bad about myself	5.9%	26.4%	22.3%	42.1%	3.3%
... a bit guilty that I haven't done what I ought	5.5%	47.1%	16.1%	28.0%	3.4 %
... uncaring about the wider world	4.1%	33.3%	20.0%	36.6%	6.0%
. it doesn't affect me at all	1.3%	12.2%	16.6%	52.4%	17.6 %

**Q28** To what extent would the following encourage you to recycle **more** things **more** often?

Tick ONE for each statement

	A lot	A little	Not much at all	Not sure / don't know
Feeling more appreciated by the Council	18.4%	33.7%	46.4%	1.4%
Being fined for not recycling	21.9%	12.0%	60.0%	6.1%
Receiving an incentive or reward for recycling	30.8 %	25.2%	42.6%	1.3%
Seeing the practical impact of recycling in my local area	49.9%	35.9%	12.9%	1.2%

**Q29** How well you feel you understand what the environmental benefits are, of recycling?

Tick ONE only

Very well	40.3%
Quite well	53.0%
Not very well	5.8%
Not at all well	0.8%

**Q30** Would it encourage you to recycle more, if you knew more about the way recycling helps the following? [PROBE FOR EACH] How much difference would knowing this make, to the amount of recycling you do? **SHOWCARD 6**

Tick ONE only for each

	A lot	A little	Not much at all	Not sure / Don't know
How recycling helps to tackle climate change	24.7%	30.7%	43.3%	1.4%
How recycling helping to reduce landfill	30.4%	31.5%	36.9%	1.2%
How recycling is saving raw materials	31.3%	32.1%	35.1%	1.5%
How recycling is reducing carbon emissions	30.7%	31.3%	35.3%	2.8%
How recycling is saving energy and resources	34.5%	30.9%	33.1%	1.5%
Knowing what happens to the materials when they are recycled	43.2%	27.9%	27.7%	1.2%

**Q31a** How concerned are you that the materials you put out for recycling might not always actually be recycled? Tick ONE only

Very concerned	28.8%	Go to Q31b
A little concerned	28.4%	Go to Q31b
Not very concerned	20.6%	Go to Q32
Not at all concerned	16.3%	Go to Q32
Don't know	5.9%	Go to Q32

**Q31b** [IF CONCERNED ABOVE] And does this put you off recycling at all?

Tick ONE only

A lot	11.9%
A bit	19.6%
Makes no difference	67.6%
Don't know	0.9%

**Q32** To what extent do you agree or disagree with the following statements?

Tick ONE only for each statement

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I feel like I pay too much Council tax to have to sort my own waste	24.7%	24.6%	17.5%	28.1%	5.1%
I don't think there are many real environmental benefits of recycling	0.8%	5.4%	11.7%	57.7%	24.4%
I don't like my neighbours to see the waste I am recycling	0.9%	3.3 %	8.6%	58.9 %	28.2%
The Council have made the whole recycling business too complicated	2.2%	13.4%	11.0%	61.5%	12.0%
Even when you separate things, a lot of the time the stuff just gets put into the same general rubbish truck	3.7%	18.7%	23.5%	46.9%	7.1%

**Q33** So, all in all, summing up your overall reasons for recycling things, if you had to choose one of the following three reasons, which one best sums up what makes you recycle?

Tick ONE only

Because I believe in it	58.6%
Because the Council asks us to do it	14.1%
Because it's part of the everyday household routine	26.5%
None of these	0.9%

Now go to Q35

## Section G: Non Recyclers

### Q34a Which of these statements do you think applies to you? SHOWCARD 7

Tick ONE only for each statement

	Yes
Awareness	
I have never thought about recycling	10.0%
My Council doesn't offer a recycling service	23.5%
Container/Collection Barriers	
I don't know what can/can't be recycled	32.1%
I don't have anywhere to store recyclable materials	32.1%
I don't have enough things to recycle	22.2%
Recycling is too messy for me	11.1%
Practical Barriers	
Recycling is too complicated	25.0%
I have never seen any information about recycling	44.4%
I don't understand the benefits of recycling	14.8%
Household Organisational Barriers	
I don't have enough time	22.2%
Its easier to throw everything in the bin	45.7%
Attitudes/Values	
No one else in my local area recycles	17.3%
I don't see why I should have to recycle	13.6%
I am not interested in recycling	12.3%
There are other more important things for me to deal with at the moment than recycling	20.0%
If I was fined for not recycling, I would probably recycle	80.8%

### Q34b To what extent do you agree or disagree with the following statements?

Tick ONE only for each statement

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
I feel like I pay too much Council tax to have to sort my own waste	25.3%	29.1%	36.7%	6.3%	2.5%
I don't think there are many real environmental benefits of recycling	0.0%	8.8%	17.5%	57.5%	16.3%
I don't like my neighbours to see the waste I am recycling	2.5%	5.0%	11.3%	52.5%	28.8%
The Council have made the whole recycling business too complicated	12.5%	33.8%	22.5%	26.3%	5.0%
Even when you separate things, a lot of the time the stuff just gets put into the same general rubbish truck	11.3%	20.0%	26.3%	33.8%	8.8%

## Section H: About You

To finish, we would like to ask you some questions about you and your household, to ensure that we have talked to a cross-section of households.

**Q35** How long have you been living in this property?

TICK ONE ONLY

Under 1 year	7.3%
1-2 years	8.4%
3-5 years	15.1%
6-10 years	15.9%
11-20 years	19.6%
21 + years	33.2%
Don't know/Can't remember	0.4%

**Q36** And for how long do you hope to continue living in this neighbourhood?

TICK ONE ONLY

For as long as possible	72.3%
For at least the next few years	18.5%
I would like to leave as soon as possible	5.5%
Other	1.0%
Don't know	2.8%

**Q37** Which of these age bands do you fall into? **SHOWCARD 8**

TICK ONE ONLY

16-24	4.1%
25-34	12.6%
35-44	19.9%
45-54	17.7%
55-64	15.8%
65+	29.9%

**Q38** Are you...?

Tick ONE only

Male	39.9%
Female	60.1%

**Q39** And what type of property do you live in?

TICK ONE ONLY

Detached	18.5%
Semi Detached	35.4%
Terraced or townhouse	32.0%
Maisonette	1.5%
Bungalow	6.1%
Low Rise Flat (under 4 storeys)	5.5%
High Rise Flat (4 or more storeys)	0.1%
Other	1.0%

**Q40** Is your home....? **SHOWCARD 9**

TICK ONE ONLY

Owned outright	38.7%
Owned with a mortgage/loan	33.7%
Rented from local authority	13.4%
Rented from private landlord	8.6%
Rented from a housing association	3.9%
Living rent free (including rent free in relative/friend's property)	1.0%
Other	0.5%
Don't know	0.2%

**Q41** How many cars and/or vans does your household have use of?

None	22.1%
One	41.3%
Two	29.1%
Three	5.5%
Four or more	2.0%

**Q42** Which of these types of household best describes you? **SHOWCARD 10**

Tick ONE only

Young Singles – young and single with no children yet	2.8%
Couple together – couple who have not had children	6.3%
Single parent – one parent with a child / children living here	7.3%
Full nest – couple with children living here	34.9%
Empty nest – couple with children now living elsewhere	25.5%
Solitary worker – adult living alone, of working age	4.7%
Solitary retiree – retired older person, living alone	13.9%
Other – please describe	4.6%

If have children in Q42, please ask how many children aged 0-4 and 5-16 living in household.

Number of children aged 0 - 4 \_\_\_\_\_

Number of children aged 5 - 16 \_\_\_\_\_

**Q43** Does anyone in your household have any long-term illness or disability, which makes carrying out everyday tasks in your home difficult or impossible?

TICK ONE BOX ONLY

Yes	23.0%
No	77.2%

**Q44** Thinking about how you spend your free time, have you given any unpaid help (e.g. fundraising, volunteering, and campaigning) in the last 3-5 years?

TICK ONE ONLY

Yes	20.6%
No	79.5%

**Q45** Which from this list best describes you? **SHOWCARD 11**

Tick ONE only

Employed	53.8%
Unemployed and available for work	1.9%
Wholly retired from work	32.5%
In full-time education, training, at college or university	1.5%
Looking after family/home	5.8%
Permanently sick/disabled	4.0%
Doing something else	0.2%
None of these	0.2%

And what type of work do you do, or did you do most recently?

IF WORKING:

PROBE FOR JOB FUNCTION, JOB TITLE, AND LEVEL OF SKILL.

OBTAIN ANY QUALIFICATIONS REQUIRED FOR JOB (E.G. DEGREE, VOCATIONAL QUALIFICATIONS – APPRENTICESHIP ETC).

IF PROFESSIONAL/MANAGER/SUPERVISOR – PROBE FOR THE NUMBER OF EMPLOYEES IN COMPANY AND THE INDUSTRY OF THE EMPLOYER.

IF RETIRED OR UNEMPLOYED, OBTAIN INFORMATION REGARDING PREVIOUS JOB FUNCTION.

IF HOUSEWIFE, PROBE FOR LENGTH OF TIME AS A HOUSEWIFE AND OBTAIN INFORMATION REGARDING PREVIOUS JOB FUNCTION AS APPROPRIATE

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OFFICE USE ONLY:		
Class 1	Higher managerial & professional occupations Professionals, employers, administrators, managers in companies with over 25 employees	1
Class 2	Lower managerial & professional occupations Associate professionals, employers, administrators, managers and higher supervisors in companies with fewer than 25 employees	2
Class 3	Intermediate occupations In administrative, clerical, sales and technical work	3
Class 4	Small employers & own account workers Self-employed non-professionals and in agriculture	4
Class 5	Lower supervisory, craft and related occupations Other supervisors, craft and related workers	5
Class 6	Semi-routine occupations Routine occupations in manufacturing, services, technical and agriculture	6
Class 7	Routine Occupations Elementary occupations in services and production	7
Class 8	Not classified Never worked, long-term unemployed (over 6 months), long-term sick	8

**Q46** To which of these groups do you belong? **SHOWCARD 12**

TICK ONE BOX ONLY

White

British	85.0%
Irish	1.0%
Any other White background (tick & write in)	3.6% .....

Mixed

White and Black Caribbean	0.3%
White and Black African	0.1%
White and Asian	0.1%
Any other mixed background (please tick and write in)	0.1%.....

Asian or Asian British

Indian	2.4%
Pakistani	2.3%
Bangladeshi	0.5%
Any other Asian background (please tick and write in)	0.8% .....

Black or Black British

Caribbean	1.2%
African	0.8%
Any other Black background (please tick and write in)	0.3%.....

Chinese	0.5%
Other (please tick and write in)	1.0%

Section I: Quality Assurance

To make sure we are doing our job properly, a number of people interviewed will be asked to confirm that an interview has taken place. Is it possible to have your telephone number so this can be checked? Your telephone number will not be used for any other purpose and you will not be contacted except for this reason.

Name \_\_\_\_\_ Telephone number \_\_\_\_\_

That's all the questions, thank you very much for completing this survey!

**Waste & Resources  
Action Programme**

The Old Academy  
21 Horse Fair  
Banbury, Oxon  
OX16 0AH

Tel: 01295 819 900  
Fax: 01295 819 911  
E-mail: [info@wrap.org.uk](mailto:info@wrap.org.uk)

Helpline freephone  
0808 100 2040

[www.wrap.org.uk/barrierstorecycling](http://www.wrap.org.uk/barrierstorecycling)

