

Driving Public Behaviours for Sustainable Lifestyles

Report 2 of Desk Research commissioned by COI on behalf of DEFRA

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Report 2: Driving Public Behaviours for Sustainable Lifestyles

Background

In October 2003, Mike Porter and Chris Pease at Defra, through Jennifer Taylor at the COI, commissioned Andrew Darnton, an independent desk researcher, to undertake a study of the research evidence available on the concept of Sustainable Development (SD) in relation to the general public. The study was designed to provide communicators in Government and civil society with the evidence base on which to develop effective Sustainable Development communications. The outcomes of the desk research study are presented as three reports:

- Report 1: The Impact of Sustainable Development on Public Behaviour
- Report 2: Driving Public Behaviours for Sustainable Lifestyles
- Report 3: Summaries of Sources

Methodology

A two-phase approach to the desk research was adopted.

In the first phase, involving datagathering and the scoping of sources, a call for information was issued by Defra to those working in the field of SD. Defra issued this call through the SD Research Network (SDRN), which is co-ordinated by Malcolm Eames at the Policy Studies Institute. Following the call for information, Andrew Darnton followed up the responses, and spread the call wider by approaching specific individuals and organisations working in the field of SD. Through these methods, a snowballing technique was adopted, with responding parties forwarding the call for information to colleagues in the field of SD who might be holding relevant data. As a result of these efforts, positive responses were received from 100 organisations, and a total of 105 relevant sources were identified, presenting findings from academic, NGO, commercial and public sector studies.

It should be noted that responding parties contributed sources on the understanding that the findings from the desk research study would be disseminated back to them and to all those who had responded.

Each of the 105 sources was scoped out in order to identify its relevant content. Relevant content was defined as that meeting the objectives for the scoping activity, which were developed with Defra and the COI, as follows:

- Establish levels of knowledge, and different interpretations, of Sustainable Development among the general public (including key subgroups).
- Examine levels of involvement in Sustainable Development activities and behaviours among the general public.
- Identify sources through which the general public acquire information on Sustainable Development.
- Identify key learnings from previous public awareness campaigns concerning Sustainable Development.
- Identify barriers and triggers to raising levels of awareness and understanding of Sustainable Development among the general public.

The findings from the scoping activity were discussed in an interim meeting involving Andrew Darnton, Defra and the COI. Of the 105 sources included in the scoping activity, 64 were selected as being relevant to the terms of Report 2; a list of the sources is given on page 52 below.

Report 2: Driving Public Behaviours for Sustainable Lifestyles

This report represents the second set of the findings from the desk research study.

Where the first report asked what impact communications on the concept of SD would have on public behaviour, this second report approaches that question from the other end. Thus this report asks 'what behaviours could the public undertake which would deliver the objectives of Sustainable Development?'

In attempting to answer this question, this report builds on an understanding of the concept of SD developed in the first report, and interprets that concept into a set of everyday behaviours which the public could adopt to achieve positive impacts in terms of sustainability. This is presented as 'an exploratory framework for a sustainable lifestyle', on page 10 below.

The first report also established that many barriers apply to public behaviours in the area of sustainability, of which those barriers addressed by communications campaigns are not the most significant. In the light of that finding, this report goes on to identify some of the other barriers and drivers applying to particular public behaviours for sustainability, based on the evidence presented in the sources included in this desk research study.

The selected sources which provide the evidence cited in this report are presented in Report 3, which comprises summaries of the relevant content in all 81 sources selected for inclusion in the reporting phase of this study, along with notes on the background to, and methodologies employed by, each source.

It should be noted that the methodology employed for datagathering means that this report is not based on a definitive selection of the existing evidence on SD (so diverse is the field, and so numerous are the sources, that no study of this kind could confidently claim to be definitive). However, the methodology employed does mean that the sources included represent those considered most relevant to the area of enquiry, by those best-placed in the field of SD to identify them. A full list of the individuals and organisations involved in the datagathering is given as an Appendix to Report 3.

Acknowledgements

Thanks are due to all those who responded to the call for information and subsequent approaches (without them, no data). Special thanks for the reading of drafts are due to Chris Church, Tracey Bedford, Tim Jackson, and Franklin Ginn. Further thanks are also due to Fay Blair, Gabriel Chanan, Birgitta Gatersleben, Jayne Cox, Paul Stern, Helen Walker, Maxine Holdsworth, Bill Scott, Jacquie Burgess, Stewart Barr, Joanne Butcher, David Regis, Jennie Bibbings, Solange Montillaud Joyel, Jenny Dawkins...

Key Findings

i) The Behaviours in a Sustainable Lifestyle

Report One of this desk research study identified that, across a number of recent quantitative studies, only around a third of the public claim to have heard of the term 'Sustainable Development'. Evidence presented in that report revealed that behind the headline level of awareness far fewer people (perhaps one in ten) understood what the term 'Sustainable Development' meant. The principal conclusion presented by the report was that running a communications campaign explicitly on the concept of 'Sustainable Development' would be unlikely to build public engagement with the concept, and would be even less likely to result in the public changing their behaviours to fall in line with the goals of sustainability.

Not only is SD a concept of which relatively few people are aware, but it is also one that the vast majority of people struggle to understand. Qualitative research discussed in Report One showed that members of the public do see the issues facing them in their daily lives as made up of combinations of the sorts of environmental, social and economic factors which together constitute Sustainable Development¹. However, when confronted head-on with the concept, most people in research go blank². One recent report produced for the Joseph Rowntree Foundation and the SD Commission suggests that even many people who work in government (and who are effectively charged with delivering aspects of SD) struggle to know what it is, or how to operationalise it³.

Research conducted with the general public also reveals that they do not know what 'SD' means in practice. In 'Green Choice: What Choice?', an influential study of public attitudes to sustainable consumption conducted by the National Consumer Council⁴, members of the public were asked to think of everyday behaviours which people could undertake which would benefit the environment. Beyond using public transport and recycling, respondents could not think of any such behaviours. Maxine Holdsworth, the author of that report, concluded that *"most consumers show they do not know how to behave sustainably."*

Given that delivering the objectives of SD depends in no small part on getting the public to behave 'sustainably', the task of informing the public about which everyday behaviours help to deliver sustainability becomes a high priority (arguably a higher priority than trying to raise their awareness of the concept of SD). The importance of this task has been recognised by some of the authors cited in this desk research⁵, most notably Tracey Bedford who, in her project on Sustainable Lifestyles for the New Horizons research programme at the Department for Transport, wrote that *"the role of the individual in sustainable development is unclear and unplanned"*⁶. She used this observation as the jumping-off point for her project, which aimed to establish a framework for the behaviours that could be included in a 'sustainable lifestyle'. The project then went on to try to identify indicators which could be used to assess the extent of each of those types of behaviours, ultimately to be able to measure a lifestyle in terms of its sustainability.

¹ Macnaghten et al March 1995; Creative February 1999; Burningham & Thrush 2001

² Andrew Irving January 1998; Quadrangle October 1999

³ Blair & Evans March 2004

⁴ Holdsworth July 2003

⁵ Burgess et al 2003

⁶ Bedford 2003

The framework that Tracey Bedford's project put forward is particularly useful for a report such as this one (not least because it provides a way of structuring the mass of evidence on the barriers and drivers to different behaviours relating to delivering sustainability). However, it must be noted that such a framework for measuring sustainability has its limitations, the greatest of which is that in its attempt to categorise and fix the behaviours relating to SD it goes against the spirit of the concept itself, which (as Report One argued) is unstable, and most effective when unfixed (in this sense it is a journey towards sustainability, or a basis upon which to conduct debate⁷). As a corollary to this, it is impossible to identify the point at which a specific behaviour becomes 'sustainable', and even less so the extent to which the adoption of a whole set of behaviours makes a lifestyle 'sustainable'. Another key limitation to the task of providing a framework for SD behaviours is that the behaviours making up a lifestyle are nearly infinite; Tracey Bedford herself describes the behaviours within a 'sustainable lifestyle' as "*too numerous to list*". All this does not however invalidate the task of attempting to interpret SD in the context of people's daily lives. The barriers to public engagement with SD must be negotiated, and concentrating on the behaviours inherent in SD rather than on communicating the concept itself offers an effective means of doing so (as the work of GAP and other community-led organisations shows – again see Report One).

Recognising the ever-changing nature of SD, Tracey Bedford terms her project 'An Exploratory Analysis', but she also gets round the problem of identifying myriad behaviours by concentrating on a limited number of groups of behaviours. In this way, not every individual behaviour must be listed, but each can be slotted into the appropriate group as it comes under consideration. The framework which Tracey Bedford provides is reproduced below, and is used for structuring the later section of this summary which examines the evidence on barriers and triggers to specific SD behaviours. However it should be noted that the framework borrowed for use here in fact combines two different classifications of types of behaviour which she lays out: one is based around the indicators of household sustainability relating to resource use (such as 'energy use', and 'waste') while the other is arranged according to how people live their lives, in terms of 'consumption clusters' (such as 'housing', 'leisure' etc). In this desk research study, the two classifications are combined, in an effort to ensure that as inclusive as possible a set of groups of public behaviours for sustainability is provided. Such an approach mirrors that reportedly used by policymakers in the area of SD (eg. at the OECD), according to Tracey Bedford.

However, Tracey Bedford deliberately restricted her project to focus only on those behaviours which relate to 'sustainable consumption', which is to say the goods and services that people use, and the impacts that that use has on the carrying capacity of the earth. Tracey Bedford provides a definition of a 'sustainable lifestyle' which can be abbreviated as "*patterns of action and consumption that people use to affiliate and differentiate themselves from other people, which meet basic needs and bring a better quality of life...*". For a complete picture of a sustainable lifestyle to be put forward, the behaviours included must cover off both 'patterns of action' and 'patterns of consumption'. Her own exploratory analysis provides a classification of the consumption behaviours in a sustainable lifestyle, but we must look elsewhere for the sustainability behaviours relating to 'patterns of actions'. Such non-consumption behaviours can be found within the 'sustainable communities' sphere of SD, and they relate to good citizenship behaviours, and those actions an individual can undertake in their local community.

⁷ OECD 2002; Blair & Evans March 2004

One way of expressing the distinction between ‘consumption’ and ‘community’ behaviours would be to see ‘sustainable consumption’ as concerning minimising the impacts of everyday behaviours (whilst achieving at least a minimum quality of life for all), while ‘sustainable communities’ relates to maximising the outputs of everyday behaviours in terms of community engagement (thereby helping to deliver at least a minimum quality of life for all). Seen in this way, the framework for a sustainable lifestyle can incorporate both the commonly-used definitions of SD [see Report 1 for a comparison of the two definitions]: the Brundtland definition, based on ‘needs’ and on minimising impacts, relates closely to ‘sustainable consumption’, while the Government definition, based on ‘a better quality of life for all’, more closely matches the ‘sustainable communities’ agenda. The recent report for the Joseph Rowntree Foundation (JRF) and the SD Commission by Fay Blair and Bob Evans suggests that it is the latter approach that is likely to produce “*workable solutions*” for SD at the local level⁸. Foregrounding the ‘sustainable communities’ agenda within SD will in turn meet the “*new sustainability challenge*” as identified by Church and Elster, whereby policymakers in SD must move from concepts to action⁹. Moving the emphasis of SD initiatives away from ‘needs’ and impacts and towards ‘quality of life’ also has the practical advantage of providing the public with a positive message, and an agenda which can deliver immediate and obvious benefits to their local environments (thus answering the question ‘What’s in it for me?’, which can prove so unanswerable in the context of sustainable consumption behaviours – see under ‘Barriers’ below).

However, having identified the need to include ‘community’ behaviours in the framework for a sustainable lifestyle, the sources in this study relating to sustainable communities (or to community involvement) do not offer even an ‘exploratory’ framework of public behaviours relating to sustainable communities. This absence of appropriate evidence seems partly due to the literature on sustainable communities being less evolved (and certainly less plentiful) than that on aspects of sustainable consumption; the sources included in this desk research reveal ‘sustainable communities’ to be a neglected, or rather an up and coming, interpretation of the SD agenda. However it can also be seen that any frameworks for the behaviours in a sustainable lifestyle (whether concerning ‘consumption’ or ‘community’) are equally unstable, and are faced with similarly innumerable behaviours to classify. Sources concerning sustainable consumption reveal the individual’s role in sustainability to be “*unclear and unplanned*”¹⁰, while government policy on ‘community involvement’ (the way in which individuals interact in communities) is similarly described as “*lacking specific aims and targets*”¹¹. The Community Development Foundation (CDF) report which makes that judgement (notably entitled ‘Searching for Solid Foundations’) calls for a clarification of what ‘community involvement’ means, and notes that government policy documents have avoided “*the question of what makes communities sustainable*”. According to Fay Blair and Bob Evans, such a question needs to be answered if progress in local sustainability is to be achieved¹².

In another CDF report¹³, the same author, Gabriel Chanan, undertakes the task of providing an ‘exploratory’ framework for measuring community activity, or put in other

⁸ Blair & Evans March 2004

⁹ Church & Elster 2002

¹⁰ Bedford 2003

¹¹ Chanan September 2003

¹² Blair & Evans March 2004

¹³ Chanan April 2004

words, the extent to which a community is sustainable. Among the 16 'factors' set out in that framework (note that they are not yet firm 'measures') several are included which relate to levels of community activity involving the general public. One of the 16 factors specifically covers 'levels of volunteering and community participation', and the author references the Home Office Citizenship Survey as providing the data which break that group of behaviours down into individual actions (and measure the extent of each). One advantage of adopting the Home Office Survey breakdown is that it is already being used by Government to measure progress towards the national target of a 5% increase in 'active community participation' by 2006¹⁴. Accordingly, this desk research report bases its framework for public behaviours relating to sustainable communities on elements of the CDF '16 factors', and within that, the breakdown of 'active community participation' behaviours used in the Home Office Survey. It should be noted that such measures of a sustainable community may soon be built into the Government's own 15 headline indicators of Quality of Life when they are relaunched in 2005¹⁵.

It is worth reiterating that the evidence base for which behaviours relating to community involvement should be included in a framework for a sustainable lifestyle is limited. In particular there is a lack of research evidence mapping the relationship between the individual and the sustainable communities agenda. However it is also the case that the identification of behaviours relating to sustainable communities is inherently more values-based than that for 'sustainable consumption' behaviours, many of which are (at least partially) supported by empirical evidence that they minimise an individual's impact on the environment. 'Sustainable communities' behaviours, producing broader social and quality of life benefits, are inherently less suited to empirical evidence and proof (for instance, two JRF sources show how the impacts of community projects are hard to tease apart and quantify, although they are tangibly felt by the people living in those communities¹⁶). Many of the 'sustainable communities' behaviours included in the framework could be contested and seen as subjective views of how a life should be lived; for example, the impact of voting on delivering a better quality of life could be disputed. While recognising that many of the 'community' behaviours identified below as being part of a sustainable lifestyle are values-based and insufficiently evidenced, it should be noted that they have been drawn from existing attempts to measure the extent to which a community is flourishing, and the extent to which individuals living in that community are active participants in it.

On account of these limitations, it should be reiterated that the 'exploratory framework for a sustainable lifestyle' set out below is a starting point for debate, an attempt to identify the full extent of the behaviours an individual could undertake which would have an impact on delivering sustainability 'in the round' (ie. both in terms of 'consumption' and 'communities'). At the same time as presenting the exploratory framework, this report calls for further work to be undertaken on it, both to shore up the evidence base for the behaviours identified as being a part of such a lifestyle, but also to lay down conditions for the ways in which such a framework should be used effectively by policymakers. (It is anticipated that such discussions will be pursued by Defra with interested parties following on from this report.) While the subject of applications of the exploratory framework is discussed in detail below, it should be stated here that the existence of the framework does not assume that all individuals should be equally encouraged to conform to the possible lifestyle it represents (this would not be effective, or desirable).

¹⁴ HO RDS September 2003

¹⁵ Blair & Evans March 2004; Chanan April 2004

¹⁶ Church & Elster 2002; Lucas et al 2003

Most importantly, some of the ends of sustainability to which the behaviours laid down here are means may be better reached not through behaviour change by individuals but through government-led interventions, the targeted delivery of public services or 'upstream solutions' (such as regulation of the private sector, or fiscal measures). This desk research study (especially Report One) has shown that many tools are available to government to deliver progress in sustainability, and that some of the bigger gains do not relate to individual or household behaviours at all¹⁷. Policymakers should consider each area one by one and decide if public behaviour change is the most appropriate route for advancing sustainability. If it is, then a step by step approach to public behaviour change (such as that provided by Paul Stern) should be followed, in which external barriers are removed before internal (psychological) factors are addressed¹⁸. Finally, just as in Paul Stern's guidance for changing a specific behaviour, so members of the public should be equally provided with the opportunities to pursue a sustainable lifestyle before they are exhorted to do so (if indeed they should ever be exhorted to do so).

The proposed 'exploratory framework for a sustainable lifestyle' resulting from this desk research study is given in full on the following pages. It is based around 13 groups of behaviours, as below; evidence on the barriers and drivers to each type of behaviour is given in section v).

1. Energy Use – Domestic
2. Energy Use – Transport
3. Water Use
4. Waste
5. Household Consumption – Food
6. Household Consumption – General
7. Housing
8. Tourism
9. Leisure
10. Banking
11. Participation
12. Volunteering
13. Neighbourliness

¹⁷ OECD 2002; Burgess et al 2003

¹⁸ Stern Fall 2000

	Groups of Behaviour	Types of Behaviour	(Example Behaviours)
Consumption Behaviours	1. Energy Use – Domestic	Renewable Energy	Enrol on green tariff; install solar panels; clear planning applications for windfarms
		Energy Saving	Turn off lights; fit insulation
		Efficient Appliances	Look for labels; buy labelled products
		Efficient Lightbulbs	Buy them; use them
	2. Energy Use – Transport	Car Use	Reduce car use
		Air Travel	Reduce air travel
		Public Transport	Use buses, trains etc
		Cycling	Do it
		Walking	Do it
		School Run	Use buses; car share
		Journeys / Routes	Reduce numbers of journeys; avoid congested routes
		Efficient Engines / LPG	Switch to an AFV
	3. Water Use	Fuel Use	Use cleaner fuels
		Water Meters	Fit one
		Flushing	Fit a hippo
		Rainwater	Use a butt
	4. Waste	Washing	Do it less; showers not baths; save water while soaping
		Reduce	Reject junk mail; use cotton nappies;
		Reuse	Repair old items; Reuse carrier bags
		Recycle	Recycle glass, paper etc
		Compost	Kitchen waste; garden waste; use green collections
		Littering	Don't do it
	5. Household Consumption – Food	Sanitary Waste	Don't flush
Organic		Buy it	
Fairtrade		Buy it	
Food Miles		Avoid them; buy seasonally; buy local produce	
Food Labelling		Look at it, act on it	

	Groups of Behaviour	Types of Behaviour	(Example Behaviours)
Consumption Behaviours [continued]	6. Household Consumption – General	Shopping Locally	Do it
		Ethical Purchasing Decisions	Choose by company reputation; boycott products
		Charity Shops	Bring and buy things
		Packaging	Avoid it
	7. Housing	Land Use	Move to a smaller house
		Habitable Standards	Demand them
	8. Tourism	Eco-tourism	Consider it
		Holidays	Take domestic holidays; take fewer (longer) holidays
	9. Leisure		
	10. Banking	Ethical investments	Use ethical banks / products
Community Behaviours	11. Participation	Civic Participation	Sign a petition; contact politicians; take part in consultation; vote in elections
		Social Participation	Be a (passive) member of a group
	12. Volunteering	Informal Volunteering	Help someone infirm; house-, baby-, or pet-sit voluntarily; do unpaid housework for someone
		Formal Volunteering	Be an active member of a group
		Civic Service Volunteering	Give blood; be a special constable; be a school governor
	13. Neighbourliness	Informal socialising	Meet friends or neighbours socially
		Intervention for the common good	Hand in lost property; stop litter louts; report crimes
		Noise pollution	Avoid causing it

It is important to note the following details about the exploratory framework above:

- i) Different sources in the desk research group certain behaviours together in different ways; for instance, 'reuse' could just as well appear under 'waste' (next to 'reduce' and 'recycle') as under shopping behaviours ('household consumption – general'),

and 'energy efficient lightbulbs' are included in different sources among ethical purchasing behaviours and energy saving behaviours. The sources also structure different community 'involvements' in a number of ways (formal vs. informal; macro-level vs. micro-level; vertical vs. horizontal etc)¹⁹; much of the difference here is semantic, as well as practical or theoretical.

- ii) 'Neighbourliness' is not part of the HO Citizenship Survey measures of 'active community participation', but the Survey allocates 'informal socialising' into a separate chapter not on 'active participation', but under the heading of 'people's involvement in their neighbourhoods'²⁰. That group of 'neighbourliness' behaviours then offers a home to behaviours relating to 'noise pollution', which are notoriously hard to situate (they are household behaviours, but do not relate to consumption; the Defra/ONS 'Quality of Life' survey puts noise in the category of 'other actions'²¹).
- iii) 'Civic service' is not mentioned in the HO Citizenship Survey, but it is a category of participation identified in the Citizen's Audit of Britain²²; it is included here so that formal volunteering in institutions and other official bodies and agencies may be added to the framework from the HO Citizenship Survey.
- iv) The framework above has been developed to incorporate all the individual behaviours for sustainability identified in the sources in this desk research; it is not a definitive checklist of all possible 'sustainable behaviours'. Where there are gaps a group of behaviours has been identified, but the sources offer no information on the behaviours within that group. Other (untapped) areas of the SD literature will point up important groups of behaviours that are omitted here. As a caveat given with the CDF's '16 factors' notes, the limits of the field, its terminology and its component elements are "*under continuing evolution*"²³, while Kersty Hobson describes SD as the subject of "*continually emergent discussions*"²⁴.

Before moving on to a discussion of the main types of barriers and drivers applying to behaviours for sustainability, it is important to note that the exploratory framework is designed to present the types of behaviours that would contribute to a sustainable lifestyle; by definition these are behaviours that could be undertaken by an individual. However, encouraging those community behaviours (identified in groups 11 to 13) on an individual level would amount in many cases to saying 'join a group', or indeed 'go round to a friend's house for dinner' (the HO Citizenship Survey very nearly asks such a question²⁵). Sources concerning community involvement make clear that just participating in a community is inherently of value to strengthening it, in that participation builds social capital (ie. the networks of friends and contacts that individuals can tap into)²⁶. The precise role of social capital in achieving local sustainability is not yet understood; however social capital is among the CDF's 16 factors for assessing a sustainable community²⁷, and the authors of the report on the Home Office Citizenship Survey note that further work on social capital

¹⁹ Whiteley March 2004; Chanan April 2004

²⁰ HO RDS September 2003

²¹ Defra/ONS September 2002

²² Whiteley March 2004

²³ Chanan April 2004

²⁴ Hobson 1999

²⁵ HO RDS September 2003

²⁶ Chanan September 2003; Whiteley March 2004

²⁷ Chanan April 2004

and on appropriate indicators for the concept will be undertaken through the Survey over coming years²⁸. Other recent studies (one notably by the Cabinet Office Strategy Unit²⁹) have also raised the issue of social capital in connection with community capacity building and better service delivery. Clearly social capital correlates with quality of life, and the 'sustainable communities' agenda offers an opportunity to join up quality of life benefits for individuals with those for communities, thereby tackling social exclusion and supporting those in disadvantaged communities. Several sources in this desk research note the current move away from LA21 to Community Strategies among many local authorities, and explore the impact of a shift in emphasis from the more environmentalist objectives of SD towards more social and economic objectives³⁰. The report for the SD Commission by Blair and Evans sees this shift, and the broader Neighbourhood Renewal Strategy, as a huge opportunity for the mainstreaming of integrated SD goals in public service delivery³¹. Those working in SD have the chance to build on the community-based achievements of LA21, and to embrace the potential offered by Community Strategies, Local Strategic Partnerships and the whole urban renewal agenda. There is a fresh opportunity for government to partner up, and to widen the focus of SD activities beyond those environmentalist projects which tend to have dominated attempts to deliver local sustainability since WSSD in Rio in 1992.

However, it is not suggested that stronger communities will be delivered simply through greater levels of community participation³²; several sources show community involvement to have a double value, because once an individual has joined up with a community group, that group will most likely deliver services which directly meet the needs of the community (ie. they help deliver the goals of a sustainable community)³³. Many of the services a community group delivers will also relate closely to some of the 'consumption' activities in the top portion of the exploratory framework set out here. A Guide for local community groups written by Chris Church for the CDF shows how many of the activities groups can undertake involve precisely those 'sustainable consumption' behaviours that are often assumed to be the domain of individuals³⁴. For instance, a community group could set up as a co-operative reconditioning and reselling used furniture, thereby addressing waste and reuse issues all at once (not to mention local shopping and local employment, among many other behaviours for sustainability). Importantly, members of the public may in fact find it easier to undertake certain 'sustainable consumption' behaviours as part of a group³⁵; the 'in and around the home' behaviour change programmes run by GAP offer a good example of how the group dynamic (a type of community participation in itself) can help people undertake changes in behaviour, and maintain those changes³⁶. Indeed GAP's own 10 year progress report explains how the Action at Home scheme has been relaunched to make it more effective by building the collectivist element back in³⁷: groups of six households will work together to agree and deliver an action plan for changes in their household behaviours.

²⁸ HO RDS September 2003

²⁹ Halpern et al November 2003

³⁰ Lucas et al 2003; Church et al February 2004

³¹ Blair & Evans March 2004

³² Chanan September 2003

³³ Church & Elster 2002; Chanan March 2004

³⁴ Church 2003

³⁵ OECD 2002; Uzzell April 2003; Surrey University July 2003

³⁶ Hobson 1999

³⁷ Ginn January 2004

The sources concerning community involvement stress how important the role of groups is in delivering local sustainability. 1997 data from the Home Office (cited in a CDF report³⁸) estimated that there were at least five Voluntary and Community Sector (VCS) organisations for every 1,000 people in the UK; this would equate to at least 300,000 groups active in local communities. The community group part of the Voluntary and Community Sector accounts for around 80% of all groups (although accurate data are not available, and arguably are impossible to collect). The report by CDF stresses that community groups are closest to the everyday interests of people; indeed the activity of these groups “*intermingles*” with that of people’s daily lives. Looked at in this way, community groups represent not a unified sector but a diverse swathe of the community landscape. It is important to note that each group has its own characteristics, often operating in isolation from other similar groups locally, and observing their own agenda and goals. Because of the “*autonomous*” nature of these groups, one source here suggests they are “*largely outside the control of the state*”³⁹, while Gabriel Chanan at CDF stresses that no attempt should be made to harness these groups to serve political purposes (as that would destroy their inherent nature, as voluntary and community-led)⁴⁰. Recalling the caveats expressed above about the values-based nature of ‘community’ behaviours, it can be noted that the autonomous nature of community groups mitigates against the concept of sustainability imposing a set of (majority, or establishment) values upon all members of the public. By presenting community participation as people’s involvement in community groups of their own making, the danger of exhorting a person to adopt someone else’s idea of a sustainable lifestyle with regard to community involvement is minimised.

The sources present the view that community groups are already working to deliver local sustainability, and they need simply to be recognised, supported, and provided with dependable funding streams⁴¹. In the words of Fay Blair, VCS organisations have become “*supplementary deliverers of public services*” as part of a trend towards “*diversified models of public service delivery*”, in which services are contracted out by local authorities to partners working in the voluntary, NGO or private sectors (thus her report put the emphasis on local ‘governance’ – involving partners - not government). In that report, community engagement and partnership working are seen as essential to delivering local sustainability, and the role of community groups, ‘professional’ voluntary organisations and other partners is foregrounded. While this desk research report adopts the individual-level perspective of the sustainable lifestyle in order to examine behaviours for sustainability, it is particularly important that the role of community groups in presenting opportunities for individuals to live sustainably is foregrounded.

Finally, having established an exploratory framework for the behaviours in a sustainable lifestyle, there remains the question of what practical purpose it may serve. In this summary report, the framework is used to structure the evidence on public behaviours for sustainability. In this instance, it serves as a tool for secondary (desk) research; however it could also serve as a tool for primary (field) research, to measure relatively the extent to which a lifestyle is being lived sustainably. Both the ‘sustainable consumption’ and ‘sustainable communities’ frameworks on which the exploratory framework draws are used to undertake such a task. Tracey Bedford evolved her framework and filled it with

³⁸ Chanan March 2004

³⁹ Whiteley March 2004

⁴⁰ Chanan April 2004

⁴¹ Blair & Evans March 2004

indicators in order to provide measures of 'lifestyle sustainability', in relation to consumption⁴². The CDF's '16 Factors' were set out in order to establish the extent to which a community is "*flourishing*"⁴³. If meaningful indicators for each group of behaviours could be established, then the exploratory framework given here could provide a similar tool for measuring the all-round sustainability of a person's lifestyle. There are however limits to such an activity, just as Tracey Bedford established in her analysis; these relate (practically) to whether the 'right' indicators can be established and 'good' data can be put against each one, and (theoretically) to whether 'sustainability' can truly be measured by any means, given that it is not a substance in itself (as stated above, it is a journey or way of thinking), and that it is not absolute, such that there is no identifiable point a behaviour (or lifestyle) can reach at which it suddenly becomes 'sustainable'⁴⁴. Both authors also stress reservations about how their frameworks could be used to measure sustainability: Tracey Bedford makes the point that one lifestyle should only be compared to other comparable lifestyles (an impossible task, it transpires), and Gabriel Chanan argues against comparing one community against another on similar grounds, and warns against trying to create 'league tables' of communities⁴⁵. Both authors also state that any measuring of sustainability should effectively weight the data according to the demographic and socio-economic qualities defining an individual or community (eg. ethnicity, size of household, income etc), in order that false expectations of what is achievable in the circumstances are not set up. The most appropriate way in which a framework of lifestyle sustainability could be used in research is to measure the extent to which the behaviours in a life are sustainable at a given point in time, then to re-measure that lifestyle later, and so use the framework to assess the progress of a lifestyle towards sustainability over time (this is also much more in keeping with 'SD' as a journey).

There is one other key potential application for 'sustainable lifestyles' (as defined through a set of behaviours), namely as a concept to be used to engage the public in the objectives of SD and the individual's role in delivering them. Report One of this study established that the concept of 'SD' was found not to engage the public when it was used in research. There is little evidence in the sources on public reactions to the concept of a 'sustainable lifestyle'. However, some authors express the view that 'lifestyle' is how people generally see the behaviours and activities that define their sense of identity⁴⁶, and when the term is brought up in research respondents exhibit no hesitation in using it. Compared to the concept of 'SD', 'sustainable lifestyles' seems to start at a point much closer to people's daily lives, but it may prove that 'lifestyle' is too loaded in meaning, and already presumes a high degree of consumption behaviour (rather as 'quality of life' is commonly interpreted as meaning 'income'). The 'sustainable' part of the term is shown to be much more problematic, as discussed in Report One; it is worth mentioning here that it may always be so, just as Jacquie Burgess writes that its use to date has been "*dogged by semantic wars*"⁴⁷. Report One identified education at all levels (and particularly the Citizenship curriculum in secondary schools) as an effective context in which to debate the complexities of SD; the same may be suggested for 'sustainable lifestyles'.

In conclusion, the exploratory framework for a sustainable lifestyle offers the chance to address the public about SD in terms of the behaviours that comprise it, which are relevant

⁴² Bedford 2003

⁴³ Chanan April 2004

⁴⁴ Bedford 2003

⁴⁵ Chanan April 2004

⁴⁶ Hobson 1999; Shove 1999

⁴⁷ Burgess et al 2003

to them. This approach was shown to be the most effective way of engaging the public in the concept when adopted by researchers in focus groups⁴⁸. Whether the concept of 'sustainable lifestyles' can be discussed effectively with the public as a means of bringing about behaviour change, or whether the policymaker's only effective option is to concentrate on particular groups of behaviours one at a time, is a question unanswered by the evidence in this study.

ii) Barriers to Behaviour Change for Sustainability

Report One in this study established that communications campaigns on the concept of 'SD' were likely to be ineffective for two reasons: one, because of the difficulty members of the public experience when confronted with the term, and two, because awareness is only one factor in driving behaviours, especially in the areas of sustainability and consumption. Given that many other factors influence behaviours, this section of the report turns to discuss some of the key barriers to behaviour change for sustainability.

Report One cited many of the sources in the desk research which present theories of behaviour change based on non-linear models. Without repeating that complex discussion here, it should just be said that the most widely-adopted models show many factors impacting from different directions on an eventual behaviour. Many of the factors are non-rational, for instance relating to opportunities or infrastructure, rather than intentional motive. In this way, simple linear ('information deficit') models showing how increased awareness of an issue leads to a reasoned decision which results in the appropriate action being taken, are overturned. The implication for policymakers is that if a behaviour is to be changed, then multiple factors, and not just awareness, need to be addressed.

Many of the non-linear models for behaviours have sprung up from research findings which showed that increased pro-environmental awareness did not lead to increased levels of pro-environmental action. Research studies identified a disconnection between attitudes and behaviours, and the term 'value-action gap' was coined to describe this disconnection. Different models address the gap in different ways, some focussing on the lack of connections, some perceiving barriers between the key influences and the intended outcome (the paper 'Mind the Gap' by Kolmuss and Agyeman provides a chronological analysis of many of these models⁴⁹). This desk research study has adopted an approach to behaviour change based on 'barriers' and 'drivers', but what is clear from the sources is that multiple barriers and drivers all impact on a behaviour in combination. Applying one driver or removing one barrier is not likely to result in significant numbers of people changing their behaviours. To illustrate this point, Paul Stern in his paper 'Towards a coherent theory of environmentally significant behaviour' states that policy interventions should adopt a number of measures all at once and keep altering the variables of each measure (eg. the level of the financial incentive, or the messages in the marketing materials used to promote it)⁵⁰. As Paul Stern puts it: "*little happens until the right combination of intervention types is found*".

Not only are behaviours shown to be complex, and the factors influencing them multiple, but the factors applying to behaviours are also shown to be complex. In different

⁴⁸ Macnaghten et al March 1995; Hobson 1999; Quadrangle October 1999

⁴⁹ Kolmuss & Agyeman August 2002

⁵⁰ Stern Fall 2000

behavioural models, barriers are expressed differently: in 'Mind the Gap' they are shown to be internal and external to an individual; in the paper by Paul Stern, they are shown to be attitudinal or contextual; in the well-known NOA model produced by Gatersleben and Vlek they are reflected in 'opportunities' and 'abilities'⁵¹. The point is also made in Report One that while some barriers are shown to be actual and some perceived, many are shown to be complex blends of both. This analysis serves to remind policymakers that removing physical barriers may still not change peoples' attitudes to a behaviour (for instance, organic food may always be regarded as expensive, whatever the different prices charged). In the study by Kersty Hobson on GAP's Action at Home programme, 'barriers' are not material obstacles to be got round but "*rich moral conversations*", offering opportunity for factual and value-based debate⁵².

Brief discussion is provided below of some of the most common barriers cited in the sources which apply across multiple groups of behaviours for sustainability; many of these barriers are complex. Barriers applying to particular groups of behaviours are discussed in part v) of this report (some of them are more one-dimensional). The obvious point should also be stressed that some of the broader factors which appear here as barriers to behaviours can also be viewed as drivers to behaviours, if they are applied differently (for instance, high cost can be a barrier, while cost saving can be a driver).

- Willingness to Act

In many areas of behaviour, some respondents say they are not interested in changing their behaviours or say they do not have time to do so. This even applies to recycling behaviours: while most people are interested in recycling, and most people do recycle some items of household waste sometimes, many surveys find a significant proportion of the public (perhaps one tenth) say they never intend to 'do' recycling⁵³. In other areas of behaviour, people say that they are not going to change their behaviours, as they cannot do any more (eg. to save water)⁵⁴. Finally, some sources note that there is a discrepancy between what people say they do and what they actually do (this is another symptom of the value-action gap). A real weakness is apparent in the research method of measuring rates of behaviour based on what people report doing; a report by Brook Lyndhurst on waste behaviours estimates that the rate at which people in research overclaim undertaking recycling may be as much as 10-20%⁵⁵.

- Low Level Behaviours

Many of the everyday behaviours relating to sustainable consumption are shown to occur at relatively low-levels of consciousness (for instance, energy use in the household, like boiling the kettle, or disposal of household rubbish, such as food waste)⁵⁶. Whether or not people are aware of the impacts of such behaviours, they are often scarcely aware that they are undertaking behaviours involving active choices. For instance, Paul Stern finds that "*many environmentally significant behaviours are matters of personal habit or household routine and are rarely considered at all*"⁵⁷. Kersty Hobson describes the household behaviour change programmes of GAP as being based on a dynamic in which low-level actions are raised up to scrutiny during

⁵¹ Gatersleben & Vlek 1998

⁵² Hobson 1999

⁵³ Defra/ONS September 2002

⁵⁴ Brook Lyndhurst 2002; SWAG 2002; Defra/ONS September 2002

⁵⁵ Brook Lyndhurst 2002

⁵⁶ Shove 1999; Brook Lyndhurst 2002; Brook Lyndhurst December 2003

⁵⁷ Stern Fall 2000

the activities in the programme, before falling back, changed, into patterns of everyday use⁵⁸. She suggests this dynamic as one reason why bigger changes prove harder to undertake, in that they upset the pattern of everyday life more (and represent ‘sacrifices’); meanwhile small-scale changes “*slip through the net of debate*”.

- Norms and Habits

While norms and habits can serve to drive or sustain behaviour changes, habits in particular often appear in the sources as barriers to behaviour change. In the model for environmental behaviour produced by the authors of ‘Mind the Gap’, habit (expressed as ‘old behaviour patterns’) represents the biggest barrier between intention and eventual action⁵⁹ [see Source 34 for the diagram of their model]. In a practical example, a study by members of the Environmental Psychology Research Group at the University of Surrey found that the type of nappy used by a mother with her first child was the most significant factor in determining her choice of nappy for subsequent children⁶⁰. In the context of a study of people’s attitudes to transport choices, Birgitta Gatersleben (incidentally another member of that Surrey Group) concluded that people need to be “*unfrozen*” from their habits before behaviour change can be undertaken⁶¹. There is also evidence presented in the sources that where a habit is associated by an individual with the experiencing of pleasure it is particularly difficult to bring about behaviour change⁶².

- Convenience

Associated with the nature of habits is the concept of convenience; Elizabeth Shove, in her work on the three concepts of Comfort, Cleanliness, and Convenience, states that convenience is normally seen by people in the context of time (a convenient act is one in which the end justifies the amount of time expended to achieve it)⁶³. As discussed in Report One, all three of those concepts can be viewed as ‘constructs’, in which actual conditions are bound up with people’s perceptions of those conditions. Another way of saying this is to note that convenience is subjective, not an absolute. Understanding the nature of convenience is important, because it crops up in research sources concerning all kinds of behaviours as the excuse most often given by people for not undertaking behaviour change (for instance, in the Surrey study on nappies, after ‘it’s the one I used for my first child’ or ‘it’s the one another mother said she used’, ‘it’s convenient’ is the most common reason given for nappy choice⁶⁴).

- Cost

High cost is another of the reasons often given by respondents for not undertaking behaviours for sustainability. However, like convenience, it emerges to be a construct not an absolute (organic food offers the best example, where large proportions of people dismiss all organic food out of hand as too expensive⁶⁵), as well as being a subjective measure (more affluent people buy organic foods, in part because the barrier of cost is lower for them⁶⁶). In the area of community activity, one source on

⁵⁸ Hobson 1999

⁵⁹ Kolmuss & Agyeman August 2002

⁶⁰ Uzzell & Leach September 2003

⁶¹ Gatersleben & Uzzell August 2003

⁶² Bedford 2003; Halpern et al November 2003

⁶³ Shove 1999

⁶⁴ Uzzell & Leach September 2003

⁶⁵ Irving January 1998; Bedford 2003

⁶⁶ Defra/ONS September 2002

civic participation observes that “*high cost*” types of volunteering (such as being a school governor) appeal to limited numbers of people; in this example ‘high cost’ means ‘time-intensive’, showing that cost and convenience are closely related (and sometimes confused)⁶⁷.

- Psychological Effects

The way in which people calculate the cost of a behaviour is one clear example of how different psychological processes serve to filter other factors influencing behaviour. A recent paper for the Cabinet Office Strategy Unit presented many models of the psychology behind public behaviours, and how these processes counteract rational arguments for changing behaviours⁶⁸. Many of the effects cited there can be observed in other research sources considering sustainability. To give one of many possible examples, ‘discounting’ processes apply to environmental issues, where people commonly see environmental problems as too remote from their daily lives to require them to change their behaviours; such processes can be seen to inform people’s views that global problems do not affect them, and that the impacts of unsustainable behaviours will only be apparent in the long-term⁶⁹ (the same point is also made about establishing the positive impacts of changed behaviours, that ‘we will only find out years from now’⁷⁰). Furthermore, in a contested area such as environmental protection, people often suggest that the (scientific) evidence on which claims for the importance of behaviour change rest is faulty⁷¹.

- Agency

A key factor in models of behaviour change is people’s belief in their own ability to bring about change. In ‘Mind the Gap’ this is called the ‘locus of control’⁷², while ‘behavioural control’ is included in Icek Ajzen’s ‘Theory of Planned Behaviour’ of 1991⁷³, and in Gatersleben and Vlek’s NOA model of 1997⁷⁴, but other authors use the term ‘agency’ (the capacity to be an agent for change)⁷⁵. Across many quantitative studies here, people’s undertaking of behaviours for sustainability is found to correlate with their reported sense of agency (for instance, non-recyclers are shown to lack agency⁷⁶, while people with higher educational qualifications – who recycle more – are shown to have a greater sense of agency⁷⁷). Not believing that one’s own behaviour can make a difference is clearly a barrier to many sorts of ethical behaviour. The Co-op Bank’s Ethical Consumer report in 1999 found that only 11% of consumers felt their purchasing decisions could bring about changes in companies’ behaviour⁷⁸. The Cabinet Office strategy paper makes a link between agency and people’s reported levels of ‘life satisfaction’ (arguing that those who take action to effect change feel generally happier about life)⁷⁹. Agency is clearly related to ‘social capital’, one of the key measures (and goals) of a sustainable community; however sources suggest much

⁶⁷ Whiteley March 2004

⁶⁸ Halpern et al November 2003

⁶⁹ Burningham & Thrush 2001; Bedford 2003; Demos November 2003

⁷⁰ Bedford 2003

⁷¹ Macnaghten et al March 1995; Stern Fall 2000; Bedford 2003

⁷² Kolmuss & Agyeman August 2002

⁷³ Uzzell & Leach September 2003

⁷⁴ Gatersleben & Vlek 1998

⁷⁵ Macnaghten et al March 1995; Barr et al 2003

⁷⁶ Brook Lyndhurst 2002; Barr et al 2003

⁷⁷ Dawe July 2002; HO RDS September 2003

⁷⁸ Cowe & Williams 1999

⁷⁹ Halpern et al November 2003

work is still to be done on what 'social capital' means in practice, and how to build it [see above under 'i) ...Lifestyles'].

- The Terminology of 'SD'

As noted earlier in this Summary, the conceptual and unstable nature of 'Sustainable Development' is a major barrier to operationalising the concept in a campaign to drive behaviour change. However, the potential effectiveness of other terms relating to SD is similarly limited by the way in which people understand them. For instance, 'Quality of Life' is often construed as meaning 'income', or a steady job⁸⁰. 'Environment' is commonly regarded as being a global issue, and one of interest only to people on the margins of society such as hippies and eco-warriors⁸¹ ('green' is also regarded as a niche concern by many⁸²); meanwhile 'local environment' is not how people in everyday life describe 'the place where they live'⁸³. 'Community' is a widely-used term, but it can confuse groups of people defined by locality with those defined by race or creed (Chanan uses the former definition, as does this report)⁸⁴. Finally, 'sustainable consumption' can be regarded as an oxymoron by some respondents; a study by Jacquie Burgess reported that women in particular felt that all consumption ran contrary to the priorities of environmental protection⁸⁵. Other studies also find respondents expressing the view that most people (especially the young) are motivated by luxury, and that ours is a 'throwaway society'⁸⁶.

- Relative Sustainability

When people in research start discussing their everyday behaviours in the context of sustainability, they frequently express confusion about how they should be behaving (a framework for a sustainable lifestyle could be used – sensitively – to answer such questions). One particular source of confusion relates to behaviours not being single, but being inter-related (into patterns, or 'clusters', as described above). For instance, several sources talk of how people in research wonder whether it is 'sustainable' for them to take their bottles to the recycling facility if it means going by car⁸⁷. Tracey Bedford presents a similar scenario, in which a 'conventionally grown' food is sold next to an organically grown one which has been flown in from another continent: which should an 'ethical consumer' buy? The author sums up the real-life contradictions within and between behaviours by saying that we live in a "*messy world*"⁸⁸.

iii) Drivers of Behaviour Change for Sustainability

While the sources in this study provide considerable evidence of the individual drivers for particular types of behaviour change, the sources do not present as many generic drivers for such behaviours as they do generic barriers. Many sources suggest that behaviour change campaigns are most effective when they combine a number of tightly-focused

⁸⁰ Macnaghten et al March 1995; Creative February 1999; Defra/ONS September 2002

⁸¹ Burningham & Thrush 2001; Lyons et al 2001

⁸² Hobson 1999

⁸³ Hobson 1999; Burningham & Thrush 2001

⁸⁴ Chanan September 2003

⁸⁵ Burgess et al 2003

⁸⁶ Irving January 1998; Encams 2002; Uzzell April 2003

⁸⁷ Hobson 1999; Lyons et al 2001

⁸⁸ Bedford 2003

measures designed to result in a specific behaviour change⁸⁹. The recommendation that policy interventions aimed at driving behaviour change combine multiple measures is particularly widespread (it could be said to be a consensus view); all those sources which provide guidelines for driving pro-environmental behaviour changes (including Paul Stern's paper, and a recent report by Demos for Defra called 'Carrots, Sticks and Sermons') set out an approach based on identifying a target behaviour, and employing a battery of tools and techniques to achieve that behaviour change. The Demos report includes the observation that there is no 'magic bullet' for driving behaviour change.

- Norms and Habits

While habits tend to be described as barriers to behaviour change, norms are often shown to be drivers. Returning to the example of recycling, it is suggested that people overclaim their recycling behaviours because they are aware that they should be recycling, ie. it is a social norm⁹⁰. Work by Stewart Barr analysing the factors influencing recycling behaviour found that 'the norm to recycle' was a significant factor in undertaking recycling⁹¹. Those quantitative findings are confirmed by qualitative work which notes that 'the green box' assumes totem status in signalling that a community is committed to undertaking recycling behaviour⁹²; in a study of waste behaviour in London, respondents spoke of how the green box reminded them to recycle, where they otherwise would not have thought about it⁹³. Stewart Barr suggests that the very act of leaving the green box out for kerbside collection places a social pressure on other residents to join in with the recycling behaviour.

- Key Influencers

Several sources suggest that the exerting of social norms is most effectively done through engaging key influencers to encourage the adoption a particular behaviour by a community⁹⁴. The recent Demos report for Defra highlighted the role of 'protagonists' (or "sneezers", as it says they are dubbed by Seth Godin) in spreading a message through social networks in the population⁹⁵. The same approach is recommended in sources concerning sustainable communities, where community leaders are seen to have an important role to play in community governance, and effective service delivery⁹⁶. One practical example of the role of community leaders in driving collective behaviour for sustainability is given in the Encams report on the clean-up of Lozells Road in Birmingham⁹⁷. In that example, not only did faith leaders combine to encourage participation in the clean-up event, but the event served to build multi-denominational networks within the community.

- Groups

Following on from the above point about key influencers, it should be reiterated that groups have a key role to play in supporting the adoption of behaviours for sustainability. As noted in Section i) 'Lifestyles...' above, many of the behaviours that

⁸⁹ Ashley et al May 1999; Stern Fall 2000; OECD 2002; Bibbings March 2003; Holdsworth July 2003; Gatersleben & Uzzell August 2003; Demos November 2003

⁹⁰ Brook Lyndhurst 2002

⁹¹ Barr September 2003

⁹² McCann Erickson 2001; Lyons et al 2001; Bedford 2003

⁹³ Brook Lyndhurst 2002

⁹⁴ Barr et al 2003

⁹⁵ Demos November 2003

⁹⁶ Chanan September 2003; Blair & Evans March 2004

⁹⁷ Encams April 2003

individuals undertake which impact on sustainability undertaken as part of a group. Community groups, in which people come together to deliver shared local goals, are shown as particularly able to meet people's needs and deliver a better quality of life, irrespective of government agendas⁹⁸. In particular, faith groups offer an alternative model of authority through which to encourage behaviours for sustainability, and one which is particularly effective at engaging people in Black and Minority Ethnic (BME) groups⁹⁹. As has also been discussed above, group working especially enables people with a lower sense of personal agency to undertake behaviour change or increase their levels of community involvement. As well as fostering a sense of the behaviour in question being seen as the social 'norm', group working can provide individuals with the support and information they need to change their behaviours, and maintain that changed behaviour until it becomes a habit¹⁰⁰.

- **Infrastructure**

Making a new behaviour possible for an individual is presented as the first step to driving that behaviour change. Evidence relating to public transport could be cited here, showing that many people (especially those in rural communities) cannot give up their car if public transport alternatives are not in place¹⁰¹. The most apparent example of how service provision can drive behaviour change is that of the kerbside collection service for recycling (the green box). All studies on recycling show a kerbside collection service to be the principal factor in encouraging that behaviour: Stewart Barr's analysis of recycling calculates it to be the largest predictor of that behaviour¹⁰²; people when asked in surveys what would make them recycle more name it as their top answer¹⁰³; most qualitative studies on recycling cite respondents saying what a difference their kerbside collections made to their behaviour¹⁰⁴. Examples from ethical purchasing can also be given, where respondents complain that not enough 'green' products are available to give them a real choice between sustainable products and others¹⁰⁵. According to GAP, supply-side solutions are vital, along with changes in demand, if ethical consumption is to keep pace with the ever-increasing amounts of consumption society is engaged in¹⁰⁶. Infrastructural factors therefore determine the extent to which people can undertake behaviours for sustainability; several sources¹⁰⁷, including one from the OECD, discuss the concept of 'systems of provision' which mean that people are habitually bound into patterns of resource use (ie. they experience 'lock-in'), and they can only make a difference in terms of the levels of use they undertake (unless, for example, they were to rip out the central heating system and start again).

- **Saving Money**

Saving money is seen to be a major factor in consumption behaviours; the Co-op Bank survey of ethical purchasing reports that quality and cost are the top two criteria applied

⁹⁸ Church & Elster 2002; Lucas et al 2003; Church 2003; Chanan April 2004

⁹⁹ HOI RDS September 2003

¹⁰⁰ Hobson 1999; Ginn January 2004

¹⁰¹ Burningham & Thrush 2001; Defra/ONS September 2002

¹⁰² Barr September 2003

¹⁰³ Lyons et al 2001; Brook Lyndhurst 2002; SWAG 2002; Defra/ONS September 2002

¹⁰⁴ MORI September 2002; Bedford 2003

¹⁰⁵ Holdsworth July 2003

¹⁰⁶ Ginn January 2004

¹⁰⁷ Shove November 2000; OECD 2002; Burgess et al 2003

by people in their purchasing decisions¹⁰⁸. As discussed above, (perceived) high cost is a significant barrier to uptake of behaviours for sustainability; reciprocally, cost saving is a significant motivator for undertaking a behaviour. This is clearly the case with domestic energy saving behaviours, for instance¹⁰⁹. However, certain limits appear to apply (these relate to some of the psychological processes described under 'Barriers' above): the money to be saved must be deemed worth the effort of the behaviour, and the behaviour must result in net savings in the (relatively) short-term. The latter point is particularly cited in relation to installing solar panels¹¹⁰.

- Financial Instruments

Examples of policy interventions given in the sources suggest that financial measures can be particularly effective in driving public behaviour change for sustainability (examples include the 'plastax' levy on plastic bags¹¹¹, and the tax breaks for cars with catalytic converters¹¹²). As with all drivers however they are most effective when used in combination with other measures; an OECD report on policies for sustainable household consumption notes that financial instruments are "*necessary if not sufficient*" to bring about public behaviour change¹¹³. Importantly, many sources stress that the infrastructure supporting alternative behaviours needs to be in place before financial instruments are applied¹¹⁴. Some sources conclude that financial incentives ('carrots') are more effective in motivating the public than levies ('sticks')¹¹⁵; in practical terms they are safer, as they avoid the risk of 'penalising' people in poorer households (or those with larger families), who perhaps have less opportunity to change their behaviours in any case¹¹⁶. Research conducted with the public certainly shows incentives to be more popular than additional charges¹¹⁷; such research also shows that the more a financial measure presents additional direct costs to an individual the less that measure is approved of. Data from the Defra/ONS Quality of Life Survey, for example, found that while 95% of respondents supported 'more or more reliable public transport', only 24% supported 'charging drivers for using certain roads'¹¹⁸. While acceptability of policy measures generally is regarded as an important aspect in effective policymaking (the public are more likely to comply with a policy if they find it acceptable), the suggestion is made by the Cabinet Office strategy paper that the acceptability of a policy designed to drive behaviour change is in inverse proportion to its effectiveness¹¹⁹.

- Information

The OECD report cited above notes that the public (internationally) tends to suffer from too much, rather than too little, information on pro-environmental behaviours¹²⁰, and people participating in Tracey Bedford's study emphatically felt likewise¹²¹. The

¹⁰⁸ Cowe & Williams 2001

¹⁰⁹ Defra/ONS September 2002; Holdsworth July 2003; Brook Lyndhurst December 2003

¹¹⁰ Brook Lyndhurst December 2003

¹¹¹ Demos November 2003

¹¹² Bibbings March 2003

¹¹³ OECD 2002

¹¹⁴ MORI September 2002; Holdsworth July 2003; Gatersleben & Uzzell August 2003

¹¹⁵ Brook Lyndhurst 2002; Gatersleben & Uzzell August 2003

¹¹⁶ Brook Lyndhurst 2002; Bibbings March 2003

¹¹⁷ Gatersleben & Uzzell August 2003

¹¹⁸ Defra/ONS September 2002

¹¹⁹ Halpern et al November 2003

¹²⁰ OECD 2002

¹²¹ Bedford 2003

challenge for policymakers as the OECD sees it is to cut through the mass of information with targeted messages. However, the limits to the effectiveness of behaviour change campaigns based on raising awareness have been discussed at length in Report One; it is only worth repeating here that the ‘value-action gap’ is regarded as a ‘self-evident truth’ by most sources¹²². For instance, a report by the team of environmental psychologists at Surrey University (on the EU ToolSust 5 Cities project) concluded that “*an everyday life perspective*” to driving behaviour change should be employed; a “*rational perspective*” based on providing information was found to be “*inadequate*”¹²³. The provision of practical information is however regarded as a key element in behaviour change campaigns by several sources. The GAP model for instance is felt to succeed because it provides information answering people’s own questions over a sustained period of time; this information enables participants to measure their own behaviours, and to consider them through informed debate with others¹²⁴. There is also evidence in the research sources that people clearly require practical information, for instance on what to recycle, how and where¹²⁵. Information about local facilities, and about the opportunities for undertaking behaviour change, is shown to encounter widespread demand (even down to the level of bus timetables¹²⁶), although the extent to which people act on the information they have is unclear. Sources show that where information is lacking, other measures to drive behaviour change may not take effect (for instance, energy saving grants need to be effectively publicised before the public will take them up¹²⁷). Members of the public who are already undertaking behaviours for sustainability commonly request feedback on the impacts of their behaviours¹²⁸. Requests for feedback are particularly common in the context of recycling, although they are often accompanied by complaints that no feedback is ever given (while assessing impacts is a complex area, eco-footprinting offers one means of showing the overall impact of recycling, and it is a tool for doing so that is already being tried¹²⁹). Finally, it should be noted that members of the public regard many sources of information with scepticism, suspecting them to be biased (this reservation applies to NGOs as well as to government at local and national level)¹³⁰. Some sources suggest information relating to sustainability should be provided by an independent agency, in order that it is trusted by the majority of the public.

- The Role of Government

Research sources commonly reveal most of the public to be cynical about the role of government in driving sustainability¹³¹. Most people express doubts that the government is serious about delivering on the objectives of sustainability, as environmentalism is believed to be contrary to their interests, particularly economically (the efforts of the business community to embrace sustainability are regarded in a similarly sceptical light). While the public assumes that the government actually represents a barrier to the delivery of a pro-environmental agenda, in the same breath

¹²² Hobson 1999; Stern Fall 2000; Kolmuss & Agyeman August 2002; Burgess et al 2003; Bedford 2003; Surrey University July 2003

¹²³ Surrey University July 2003

¹²⁴ Hobson 1999; Barr et al 2003; Burgess et al 2003

¹²⁵ SWAG 2002; Brook Lyndhurst 2002; MORI September 2002; Holdsworth July 2003; Barr September 2003; MPG November 2003

¹²⁶ Angus October 2001

¹²⁷ Stern Fall 2000

¹²⁸ Irving January 1998; Burningham & Thrush 2001; Lyons et al 2001; Bedford 2003

¹²⁹ Bibbings March 2003

¹³⁰ Burgess et al 2003; Bedford 2003

¹³¹ Macnaghten et al March 1995; Irving January 1998; Rose-Troup 2001; Holdsworth July 2003

they tend to call for the government to take a lead on such issues¹³². Several sources in this study report people saying that if the government were to set a good example (or provided them with a decent local environment to start with) then they as individuals would follow that lead. While this is often given by way of an excuse for not acting, and tends to underline people's feelings that they as individuals cannot bring about change, it also suggests that the government, locally and nationally, could trigger public behaviour change if they adopted conspicuously sustainable practices. However, communicating the good intentions or actual achievements of government regarding sustainability seems to be particularly difficult. In the first place, people seem to be disinterested in information about SD. Next, when presented with such information respondents struggle to understand it. This point is particularly relevant in the context of the Headline Indicators of Quality of Life, which respondents could not relate to, nor could they see the logic behind the concept, or the connections between the individual indicators provided¹³³. Finally, respondents in the research on indicators were quick to react to the indicators by blaming the government for measuring things rather than acting¹³⁴. What people want to see is hard evidence of government impacts on quality of life, in terms of tangible improvements in the world around them, and the provision of government information seems only to inflame their frustration at not seeing those improvements.

As a footnote to this overview of drivers of behaviours for sustainability, it is important to take into consideration the idea of unintentionally-sustainable behaviours. The point has been made above that behaviours are complex, and that behaviour change requires that a number of inter-relating factors are addressed. One consequence of this observation is that behaviours for sustainability can be undertaken without conscious motivations relating to sustainability driving them¹³⁵. For instance, the provision of a kerbside collection service can drive recycling without any apparent change in an individual's intention to recycle for pro-environmental reasons (as one example of the evidence for this, Stewart Barr's model for recycling shows that the provision of a kerbside collection service statistically predicts only the 'behaviour of recycling' and not the 'willingness to recycle'¹³⁶ – see his diagrams in Source 61 below). Similarly, in the Defra/ONS Survey, the motivation to save money was the reason given by the vast majority of respondents for undertaking energy saving behaviours, while environmental issues were only given as a reason by a small minority of respondents¹³⁷. The question is therefore raised of whether behaviours undertaken for reasons other than those relating to sustainability are actually pro-sustainability behaviours at all. Paul Stern's paper points up this distinction by saying that environmentalist behaviours can be divided into those of pro-environmental intent, and those with pro-environmental impacts¹³⁸. From the point of view of a policymaker trying to drive behaviour change, identifying the main motivation that drove the behaviour change is probably of less importance than the fact that it has happened; however, from the point of view of a researcher trying to measure the extent of behaviours for a sustainable lifestyle, the decision whether to include those behaviours which are only unintentionally sustainable is pivotal.

¹³² Burgess et al 2003; Holdsworth July 2003; Brook Lyndhurst December 2003

¹³³ Macnaghten et al March 1995

¹³⁴ Creative February 1999

¹³⁵ Kolmuss & Agyeman August 2002

¹³⁶ Barr September 2003

¹³⁷ Defra/ONS September 2002

¹³⁸ Stern Fall 2000

iv) Public Lifestyles, by Audience

In exploring public behaviours relating to sustainability, the research sources included in this desk report contain rich evidence of the differences between different groups within the general public. While this study does not attempt to describe the current lifestyles of people in different groups, it may be useful to bring together some of the findings regarding particular audience subgroups here.

The disciplines of marketing and communications have for many years worked according to principles of ‘targeting’ and ‘market segmentation’. However, a survey of the research literature in the field of SD assembled for this study would suggest that practitioners tend not to address SD issues according to sub-groups. When sources do want to discuss SD attitudes and behaviours within specific subgroups, the same few studies crop up (for instance, the JRF report among disadvantaged communities, ‘Rainforests are a long way from here’¹³⁹, or elements of the NCC report ‘Green Choice: What Choice?’¹⁴⁰).

Nonetheless many sources note that observing the differences between subgroups in the population or between different local communities is essential to effective action for sustainability. For instance, GAP, in their work on driving small-scale behaviour changes for sustainability, has set up different programmes to target particular sections of the population, including low income households¹⁴¹. Encams meanwhile have adopted a method of campaigning based on undertaking segmentation studies of the public in relation to each of their campaign areas, be it waste, littering or dog fouling. Brook Lyndhurst’s work on renewable energy in London recommended that campaigns to encourage the take-up of domestic solar panels targeted a niche sector of the general public for whom the high upfront costs of solar panels were not a deterrent¹⁴².

On a more theoretical level, Paul Stern commented that “*different individuals face different impediments to behaviour change*”, suggesting a targeted approach to behaviour change for sustainability is essential¹⁴³. He also observes the point, which is well-made in ‘Mind the Gap’ and several other sources, that the barriers to undertaking behaviour change are not evenly-distributed across different types of people. This point has already been raised in this summary in the context of setting indicators for sustainability, where it was stressed that weighting should be applied to the data collected to reflect the different circumstances in which people (and communities) find themselves¹⁴⁴. For reasons of effectiveness and fairness therefore it is recommended that a targeted approach is adopted to SD behaviour change campaigns.

Some characteristics of key subgroups evidenced by the research sources are given below:

- Upmarket Groups

¹³⁹ Burningham & Thrush 2001

¹⁴⁰ Holdsworth July 2003

¹⁴¹ Ginn January 2004

¹⁴² Brook Lyndhurst December 2003

¹⁴³ Stern Fall 2000

¹⁴⁴ Bedford 2003; Chanan April 2004

People with higher incomes are found to report higher levels of pro-environmental concern than do others¹⁴⁵. Higher educational attainment and being in a high socio-economic grade (SEG) are shown to correlate with a greater sense of personal agency¹⁴⁶; people in high SEGs were also shown to be more confident of explaining the concept of ‘Sustainable Development’ than were others, and they were also more accurate in their explanations when they did so¹⁴⁷. Participants in GAP’s Action at Home scheme were shown to have an upmarket profile, in terms both of income and educational qualifications¹⁴⁸. Recycling is reported to be rated as more important by people in high SEGs than by others¹⁴⁹; and the proportion of people ‘regularly recycling’ is reported to decline down the social classes¹⁵⁰. However, households in higher SEGs use more energy than do other households of the same size¹⁵¹, and while people in higher SEGs appear to buy ethical products at higher rates than do other people (especially organic food and energy-saving lightbulbs) they also report avoiding unethical products at a lower rate than do other people¹⁵².

- Low Income Groups

The concerns of people in disadvantaged groups are reported to be focussed on their local area¹⁵³; people in low SEGs are also reported to have smaller spheres of activity than do others, with more of their daily lives conducted in a small area around where they live¹⁵⁴. While those in lower SEGs appear to focus on short-term concerns, they also report environmental concerns (when prompted) at similar rates to those in more affluent groups¹⁵⁵. People in disadvantaged groups tend to suffer more problems in their local environment¹⁵⁶, while informal socialising (with friends or neighbours) is reported to happen less often as people’s income declines, and the relative deprivation of the place where they live increases¹⁵⁷. Sustainable consumption behaviours (‘ethical purchasing’) are reported to be regarded as a luxury by those in low SEGs¹⁵⁸ and recycling is said to be “*a peripheral issue*” for those in deprived communities¹⁵⁹. People in the lowest social classes report ‘regularly recycling’ at the lowest rates of all groups, although it is suggested that those living in the most deprived local authority areas are provided with the fewest useful opportunities to recycle¹⁶⁰.

- Black and Minority Ethnic groups

Fewer people in BME groups report enjoying the place where they live than do those in White groups (people in areas of high deprivation are also less likely to say they enjoy living where they do than are those in other areas)¹⁶¹. However, more people in BME

¹⁴⁵ Stern Fall 2000; Cowe & Williams 2001

¹⁴⁶ Encams July 2002; HO RDS September 2003

¹⁴⁷ Bibbings March 2003

¹⁴⁸ Barr et al 2003

¹⁴⁹ Bibbings March 2003

¹⁵⁰ Defra/ONS September 2002

¹⁵¹ Surrey University July 2003

¹⁵² Defra/ONS September 2002

¹⁵³ Burningham & Thrush 2001

¹⁵⁴ Holdsworth July 2003

¹⁵⁵ Holdsworth July 2003; Bibbings March 2003

¹⁵⁶ Burningham & Thrush 2001; Blair & Evans March 2004

¹⁵⁷ HO RDS September 2003

¹⁵⁸ Holdsworth July 2003

¹⁵⁹ MORI September 2002

¹⁶⁰ Brook Lyndhurst 2002; Bibbings March 2003

¹⁶¹ HO RDS September 2003

groups report feeling able to influence decisions in their local area than do those in White groups (Black people are the most likely ethnic group of all to report this sense of local agency). People in Pakistani groups are the most likely of those in any ethnic group (including White people) to report knowing many people in their neighbourhood, while Bangladeshi people are most likely to report socialising frequently. People in Black groups are most likely to report having undertaken voluntary work for a group, and this volunteering is most commonly initiated through places of worship. However, people in BME groups are reported to be under-represented in community groups whose work relates to the objectives of LA21¹⁶². (There is little information in the sources about the sustainable consumption behaviours of people in different BME groups.)

- Older People

Older people are reported to place a higher priority on litter and waste issues in their local area than do younger people¹⁶³. They are also reported to have more positive attitudes towards reusing behaviours¹⁶⁴. People aged 65 to 74 are the most likely of any age range to report 'definitely enjoying' where they live¹⁶⁵. People aged over 65 are the least likely of people of any age to report having undertaken voluntary work for a group.

- Younger People

People in the 18 to 25 age range are reported to be the most likely to say that they do not have time for environmental issues¹⁶⁶. Younger people are also said to place a higher priority on drugs and crime than on other problems in their local area¹⁶⁷. Overall, younger people are reported to be motivated by the promise of obtaining luxuries and of enjoying leisure¹⁶⁸; those aged 18-25 are reported to socialise more frequently than those in other age ranges¹⁶⁹. 16 to 34 year olds are shown to recycle least often of all age ranges¹⁷⁰.

- Teenagers

Teenagers tend to regard environmental problems as far off in the future¹⁷¹; some teenagers are reported to find the natural environment 'boring' and 'uncool'¹⁷². Teenagers are also reported to think that they cannot personally make a difference to environmental problems¹⁷³.

¹⁶² Lucas et al 2003

¹⁶³ Encams April 2003

¹⁶⁴ Lyons et al 2001; Encams 2002

¹⁶⁵ HO RDS September 2003

¹⁶⁶ Holdsworth July 2003

¹⁶⁷ Encams April 2003

¹⁶⁸ Macnaghten et al March 1995

¹⁶⁹ HO RDS September 2003

¹⁷⁰ MORI September 2002

¹⁷¹ Uzzell April 2003

¹⁷² Scottish Natural Heritage 1999

¹⁷³ McCann Erickson 2001

v) Barriers and Drivers to the Behaviours in a Sustainable Lifestyle

This final section of the summary presents evidence on barriers and drivers cited in the sources in connection with specific behaviours, or types of behaviours. The evidence is structured in line with the 'exploratory framework for a sustainable lifestyle', presenting 13 groups of behaviours, with several types of behaviours within each group.

1. Energy Use – Domestic

Work by Brook Lyndhurst and MORI for London Renewables reports that for the public "*energy is a low salience issue*": only 10% of respondents reported thinking 'a great deal' about the amount of energy they use in their homes, while 46% reported doing so 'a fair bit'¹⁷⁴. Those who said they struggled to pay their energy bills thought about it more than did others; these data suggest price is the aspect of energy use people most think about.

1.1. Renewable Energy

- Work by the Scottish Executive¹⁷⁵, by GO East (the Government Office for the East of England)¹⁷⁶, and by Brook Lyndhurst for London Renewables¹⁷⁷ translates the UK **Government target** of 10% of all electricity to be generated from renewable sources by 2010 (18% in Scotland) into delivery on the ground in their regions. In Scotland, it is anticipated that the target of 18% of energy to come from renewable sources (up from 10% now) could be met through hydro power and onshore wind power; in the East of England, GO East interprets the target regionally to be 14% (up from 0.45% currently) and estimates this could be delivered through establishing 150 onshore wind turbines and 500 offshore wind turbines; in London, to meet the GLA local target for energy from renewable sources of 14%, over 10,000 premises will require solar panels, 25,000 homes will require solar-powered water heating, and over 500 wind turbines will need to be established (plus energy from 1,000 wind turbines drawn through the national grid will be needed).
- The Brook Lyndhurst report for London Renewables also states that 4% of the 14% share of energy to come from renewables is intended to be delivered through households moving across to **green tariffs** (ie. their domestic electricity will be provided from renewables). However, in that study, 74% of respondents said they had received no information from their energy provider about green tariffs. The survey found respondents would be prepared to pay on average £2.64 per month extra for green electricity. However, in focus groups for the same study, many people said that changing electricity suppliers generally was a hassle not worth undertaking. The Defra/ONS Quality of Life survey reports that 53% of respondents supported the introduction of an 'energy/carbon tax for electricity and other fuels which damage the environment'¹⁷⁸.

¹⁷⁴ Brook Lyndhurst December 2003

¹⁷⁵ Scottish Executive 2003

¹⁷⁶ GO-East October 2003

¹⁷⁷ Brook Lyndhurst December 2003

¹⁷⁸ Defra/ONS September 2002

- The Brook Lyndhurst report for London Renewables found that 75% of respondents think **wind power** is a good idea, but only 58% would support a wind turbine site near to where they lived. That survey found people's main reservations about a wind turbine site in London were: a lack of space (among 25%), the ugly appearance of the turbines (9%), and the noise impact (9%); 32% reported no concerns. Work by MORI Scotland for the Scottish Executive with people who live near to windfarms (within 20km) found that only 12% felt the local landscape had been spoiled, and only 2% were affected by noise from the turbines¹⁷⁹. Asked what impact the windfarm site had had on their local area, 23% of respondents said they had no opinion, and another 51% said it had had no effect on their area. 20% of respondents said the impact had been positive, while only 7% said it had been negative. The GO East report (based on research with members of parish councils, and town councillors) suggests that the concept of "*community energy*" has strong appeal, whereby a local community around a wind turbine benefits by being able to draw on the energy from it.
- The Brook Lyndhurst report for London Renewables found that 81% of respondents think **solar power** is a good idea, and that 76% would support a solar panel site near to where they lived. Cost is perceived as the main drawback of solar panels (by 19%), along with their appearance (by 19%). Respondents in the focus groups in that study were very surprised to learn that the solar cells required to power a home could cost £8,000 and would only begin to provide a real-terms cost saving after 15 to 20 years. In view of that cost, only 4% of respondents said they would be 'very likely' to install solar panels on their homes, while 18% said they would be 'quite likely' to do so. Reservations about high costs and long break-even times are also present in the GO East report.

1.2. Energy Saving

- The Defra/ONS Quality of Life survey reports that 40% of respondents said they had cut down their household energy use on a regular basis. However, when asked why they had done so, the vast majority of respondents answered that they had cut down their household energy use in order to save **money**: 81% gave this reason. Only 15% of respondents who had cut down their household energy use said they did so to help the environment / reduce pollution. In the Brook Lyndhurst report for London Renewables, 14% of respondents said they undertook energy saving behaviours 'all the time', while the largest proportion undertook them 'most of the time' (43%); only 10% said they undertook such actions 'rarely' or 'never'. In that study, people who were not concerned about whether they could pay their energy bills seemed less interested in taking energy saving measures; some respondents said that such measures would "*only save a few quid*" anyway.
- Of the 60% of respondents in the Defra/ONS Quality of Life survey who said they had not cut down their domestic energy use, 60% said that this was because they **could not use any less** energy at home; this was the reason most commonly given for not cutting domestic energy use.
- In the Brook Lyndhurst report for London Renewables, 81% of respondents who said they undertook energy saving measures reported 'actively **turning lights off**'. Other actions were much less common, such as turning appliances off instead of leaving

¹⁷⁹ Scottish Executive 2003

them on standby (among 32%), purchasing energy efficient lightbulbs (19%), having double-glazing or loft insulation (12%), and purchasing energy efficient appliances (9%). The report concludes that energy saving is limited to a very few activities in all but a minority of London households.

- The NCC ‘Green Choice: What Choice?’ report presents survey data finding that 79% of respondents said they knew how to cut down their energy bills¹⁸⁰. However, only 21% of respondents said they were aware of **energy efficiency schemes** to help people insulate their homes. Some consumers complained that the information they did have on energy saving was confusing and filled with jargon. In the research among town and parish councillors by GO East, many respondents felt bigger grants should be provided for undertaking energy saving activities.

1.3. Efficient Appliances

- In the Brook Lyndhurst report for London Renewables, 9% of respondents who said they undertook energy saving measures reported **purchasing energy efficient appliances**. In a survey in Devon comparing participants in GAP’s Action at Home programme to non-participants in the general public, 75% of GAP members reported looking for energy efficient appliances, as opposed to 56% of the general public¹⁸¹.
- Citizen’s Panel data from Angus Council show that 80% of respondents claimed to have bought a washing machine based on its energy efficiency, making that the most commonly-cited of all **factors in the purchase decision** (ahead of price, cited by 76%)¹⁸². Regarding other appliances, the primacy of energy efficiency in purchase decisions was less clear, with 70% of respondents reporting having chosen a tumble dryer on energy efficiency, against 68% choosing on price, while 59% reported choosing a dishwasher on price, and 58% did so on energy efficiency.

1.4. Efficient Lightbulbs

- In the Brook Lyndhurst report for London Renewables, 19% of respondents who said they undertook energy saving measures reported purchasing **energy efficient lightbulbs**. 31% of all respondents in the Defra/ONS Quality of Life survey said they had used at least one energy-saving lightbulb in their home over the last year; 41% of respondents in the top **social class** said they had done so.

¹⁸⁰ Holdsworth July 2003

¹⁸¹ Barr et al 2003

¹⁸² Angus October 2001

2. Energy Use – Transport

2.1. Car Use

- A study conducted in the Netherlands by Gatersleben and Vlek of 9 household consumption behaviours and their relationship to perceived quality of life found that reducing car use was the behaviour change that fewest households felt it was possible for them to undertake¹⁸³. Jacquie Burgess concludes from this evidence that using the car “*will not be given up without a struggle*”¹⁸⁴. The NCC ‘Green Choice: What Choice?’ report found that all respondents who were drivers regarded car use as “**essential**”¹⁸⁵.
- A further study by Birgitta Gatersleben (this time in Guildford) found that 50% of respondents stated that they would be willing to **reduce their car use**, but only 43% of respondents thought it would be possible for them to do so¹⁸⁶. 47% of respondents in the survey said it would not be possible for them to reduce their car use. These data are similar to those collected nationally by the Commission for Integrated Transport (cited in the same paper) who found that 66% of car users said they were unwilling to reduce their car use.
- In the Defra/ONS Quality of Life survey, 31% of respondents said they had cut down their use of the car for short journeys on a regular basis (while 37% said they had deliberately used public transport instead of the car on a regular basis)¹⁸⁷. However, when asked why they had done so, the majority of respondents answered that they had cut down their use of the car in order to **get more exercise** (among 59%), while 17% said they had done so to **save money**. Only 17% of respondents who had cut down their use of the car for short journeys said they had done so to help the environment / reduce pollution. Of the 49% of respondents who said they had not cut down their use of the car for short journeys on a regular basis, 37% said that this was because they could not use their car any less than they did, 26% said it was because they did not want to or did not have the time to do so, and 22% said it was because they lacked public transport alternatives.
- ‘Green Choice: What Choice?’ reports that cost and convenience are key factors in consumption choices, and that **actual costs** can be misunderstood by consumers. Respondents in discussion groups were likely to calculate public transport costs as additional rather than alternative to those of private car use (the costs of car owning are commonly overlooked, and only fuel is accounted for).

2.2. Air Travel

- Qualitative evidence presented in Tracey Bedford’s ‘Exploratory Analysis of Sustainable Lifestyles’ suggests that people are reluctant not to **travel by air** when it is

¹⁸³ Gatersleben & Vlek 1998

¹⁸⁴ Burgess et al 2003

¹⁸⁵ Holdsworth July 2003

¹⁸⁶ Gatersleben & Uzzell August 2003

¹⁸⁷ Defra/ONS September 2002

essential to their getting a holiday in the sun¹⁸⁸. When asked to think about not flying, one respondent asked the interviewer to “*be more realistic*”.

- The OECD report on sustainable consumption has few suggestions for changing public behaviours regarding air travel, but it does suggest that investment in the **rail infrastructure** can be effective in diverting potential passengers away from air travel (especially for journeys under 500km in distance, over which the train can be quicker than air travel; it notes that half of all European flights are of under 500km)¹⁸⁹.
- The MORI Environment Bulletin reports that 42% of respondents are opposed to proposals to **build more airports** in Britain, while 31% support such proposals¹⁹⁰.

2.3. Public Transport

- In the Angus Council Citizen’s Panel 36% of respondents reported being willing to travel to their place of work or study by **public transport**, while 64% said they would not be willing to do so¹⁹¹. However, 46% of the Panel respondents said they would use buses more often if the service was more frequent, 45% said they would do so if it were easier to find out about services and timetables, and 44% said they would if the fares were lower. 39% said they would consider doing so if the journey times were shorter, and the buses came on time.
- As noted above, respondents in the ‘Green Choice: What Choice?’ report were likely to calculate public transport **costs** as additional rather than alternative to those of private car use.

2.4. Cycling

- In the Angus Council Citizen’s Panel, 56% of respondents said they would cycle more if drivers were more understanding towards cyclists, and 52% said they would do so if there were safer **cycle routes**. In the Defra/ONS Quality of Life survey, 79% of respondents agreed with the proposition that more cycle lanes should be provided.

2.5. Walking

- In the Angus Council Citizen’s Panel, 55% of respondents said they would walk more if **walking routes** were safer, and 55% also said they would if routes for walking were better lit. 50% of respondents said they would walk more if there were more direct routes, while 46% said they would if there were fewer cyclists on footways, and 45% if there were more pedestrianised areas.

2.6. School Run

- A Scottish Executive survey of secondary school pupils in Scotland found that the top three factors reported by pupils in their choice of how to travel to school were ‘**punctuality**’, ‘weather’, and ‘stranger danger’; environmental concerns were ranked

¹⁸⁸ Bedford 2003

¹⁸⁹ OECD 2002

¹⁹⁰ MORI 2003

¹⁹¹ Angus October 2001

10th out of 11 factors¹⁹². Responses from parents in that survey found that ‘punctuality’ was also their top concern.

- The CDF Guide for community groups mentions the idea of a ‘**walking bus**’ scheme which helps children walk to school together safely; in some primary schools 80% of children are reported to travel by ‘walking bus’¹⁹³.

2.7. Journeys / Routes

- The OECD report on sustainable consumption suggests that governments move the debate on from public vs. private vehicles, to encouraging people to think of combining their trips for different purposes, and to rule out **the need for journeys** through, for instance, living closer to their places of work, or not using out of town shopping centres. However, the ToolSust study of sustainable household behaviours in 5 European cities suggests that town planning is the chief factor in public journey patterns; in two of the cities people tended to walk to local shops, while in the other three cities, people drove to out-of-town shopping centres, or more distant shops¹⁹⁴.
- In the Defra/ONS Quality of Life survey, 53% of respondents agreed with the proposition that drivers’ access to certain roads should be ‘restricted at times when air pollution levels are high’. Only 34% of respondents supported an increase in parking restrictions and a rise in parking meter charges, while only 24% supported **charging drivers** for using certain roads. The MORI Environment Bulletin reports that the British public are divided on the idea of congestion charging: 42% of respondents support it while 42% are opposed to it. However, the Bulletin also cites data collected by MORI for the GLA in March 2003 which found that 50% of London residents supported the congestion charge, while only 34% were opposed to it.
- **Park and ride schemes** were found to be acceptable to 87% of residents in the survey of attitudes to transport problems in Guildford. Increasing parking charges by £1 per hour was the least acceptable of 14 measures among residents; road charging was the second least supported measure, among 24% of residents. The report notes that ‘painful’ measures are more acceptable to the public than ‘painless’ ones.

2.8. Efficient Engines / LPG

- A preparatory study on public understanding of alternatively fuelled vehicles (AFVs) conducted in Bristol found that roughly one in ten people could name each of natural gas vehicles (CNGs) or solar cars as types of AFV¹⁹⁵. Other types of AFV were “*virtually unknown*” to the public.

¹⁹² Derek Halden 2003

¹⁹³ Church 2003

¹⁹⁴ Surrey University July 2003

¹⁹⁵ Lane 2000

2.9. Fuel Use

- The Welsh Consumer Council report on Sustainable Consumption cites financial measures as having been effective in encouraging the uptake of unleaded petrol, and low-emission vehicles¹⁹⁶.

3. Water Use

- When respondents in the Defra/ONS Quality of Life survey were asked about their **domestic water usage**, 29% said they had reduced their water usage 'on a regular basis'¹⁹⁷. 71% said they had not reduced their water usage on a regular basis, of whom 62% said that this was because they could not use any less water at home. The OECD report on sustainable household consumption stresses that households are responsible for a relatively small proportion of water consumption in most countries, such that governments should use regulatory tools to improve efficiencies in the supply system, and financial measures to reduce levels of commercial water use¹⁹⁸.

3.1. Water meters

- In the Defra/ONS Quality of Life survey, 40% of respondents agreed with the proposition of introducing '**water metering everywhere**'.

3.2. Flushing

- A study of the sustainability of routes for sanitary waste disposal cites Environment Agency data calculating that flush water accounts for 35% of average domestic water use in the UK¹⁹⁹. The study also reports findings to show that the **average flush volume** of a UK WC could be reduced from 9 litres to 4 litres without any risk of drain blockages downstream. (Other sources suggest members of the public fit a 'hippo' to reduce the flush volume from their cistern.)

3.3. Rainwater

- (Some sources suggest the public use a rainwater butt; no data are presented on attitudes to this behaviour.)

3.4. Washing

- (Some sources suggest the public reduce the amount of water used while washing, or reduce the number of occasions on which they wash; no data are presented on attitudes to such behaviours.)

¹⁹⁶ Bibbings March 2003

¹⁹⁷ Defra/ONS September 2002

¹⁹⁸ OECD 2002

¹⁹⁹ Ashley et al May 1999

4. Waste

- In a survey of public attitudes by the Scottish Waste Awareness Group (SWAG), 14% of respondents said they didn't know what their weekly **household waste** was made up of, and another 11% said 'household waste'²⁰⁰. 67% of respondents identified items of kitchen waste, 28% identified items of general household waste, and 5% mentioned items of bathroom waste.
- A 1999 MORI survey, cited in a MORI report on waste for the Cabinet Office Strategy Unit, found 94% of respondents agreeing that disposing of waste poses **an environmental problem** (49% said a 'serious problem', and 45% a 'fairly serious problem')²⁰¹. In contrast, the report states that when asked spontaneously about their concerns, only 7% of respondents mentioned waste.
- The SWAG survey also found that the majority of respondents – 55% – said they did not know what happened to their domestic waste after it was collected from their household (of the 45% who did, 95% correctly identified the methods used by their local authority, namely **landfill** and/or Energy from Waste (EfW) incineration). The MORI report for the Cabinet Office puts forward a similar view, citing (for example) a survey in Kensington & Chelsea in which less than half of respondents knew where their waste went to after it was collected. Of those in the SWAG survey who identified landfill, only 15% identified 'lack of space' as a disadvantage to this method, while 28% identified 'pollution'. The SWAG report recommends that work is undertaken to educate the public about waste disposal methods.
- In the SWAG survey, 82% of all respondents said they did not know how much current waste disposal methods **cost**. 7% of all respondents (the largest group who gave an answer) estimated costs at over £10 per week; the researchers comment that actual average costs in Scotland are around £1 per week per household. A report on household waste behaviour in London undertaken by Brook Lyndhurst and MORI notes that the public suffers from many misconceptions about the costs of waste disposal, recycling and the workings of the council tax²⁰². For instance, 36% of respondents believed that the council saved money through providing recycling services, while only 15% of respondents correctly estimated that the average cost of waste disposal in London was below £100 per household per year. There was a common myth among respondents in discussion groups undertaken for the Brook Lyndhurst report that most of the money raised by council tax monies is spent on waste disposal. The report notes that such misconceptions combine to make a policy of charging for the collection of household waste more unacceptable to the public.
- The Brook Lyndhurst waste report notes that the concept of **charging** for collecting household waste was unpopular with many respondents, who broadly felt that they had paid their Council Tax and that the necessary funds should be found from there. The MORI survey for that report asked respondents about incentives, and found that older respondents, 'greens', and Asian respondents were least likely to support incentives being paid, while lower income households and non-recyclers were more likely to

²⁰⁰ SWAG 2002

²⁰¹ MORI September 2002

²⁰² Brook Lyndhurst 2002

support incentives. Regarding charging for waste collection, the data revealed that this pattern was reversed (those on lower incomes were more opposed to charging than were others). Qualitative evidence collected by MORI for their report to the Cabinet Office also presents respondents as being almost entirely negative about proposals for charging for waste collection, and as talking about “*stealth taxes*” and “*paying twice*”. Respondents stressed that in order for charging to be at all fair adequate opportunities to recycle would have to be available to everyone before any charges were introduced. Even with such a universal infrastructure in place, respondents still felt that charges would be unfair on the poor and on large families. Charges were also regarded by respondents as costly to administer and enforce, and possibly ineffective in that they would result in avoidance with negative consequences, such as fly-tipping. In several other sources, respondents make similar points about the unintended consequences of charging²⁰³.

4.1. Reduce

- The report on the SWAG survey of public attitudes identifies nine types of waste **reduction behaviour**: taking clothes to charity shops; home composting; avoiding over-packaging; rejecting junk mail; solar power (avoiding batteries); mechanical power (avoiding batteries); using services (give days out as presents not wrapped gifts); refusing or reusing carrier bags; repairing old items (eg. furniture, appliances and toys). 23% of respondents in the SWAG survey reported undertaking any of these reduction activities; however, 35% of respondents also reported reducing their waste by recycling. Recycling was the most popular reported reduction activity, although the report stresses that it does not consider recycling to be a legitimate reduction activity (Note: such an assertion points up the inherent difficulty in providing a definitive framework for a sustainable lifestyle). Among the 23% of respondents who were judged ‘true reducers’, 25% reported taking old clothes to the charity shop, 24% reported composting, and 16% used their own shopping bags or boxes. Considering measures to drive waste reducing, the report stresses that the public needs to be better informed about what waste reduction entails. In terms of infrastructure, the report argues the public needs more choice in the products it can consume, particularly with regard to low packaging.
- In a paper analysing the two behaviours of **recycling and reducing** based on survey data collected in Exeter, Stewart Barr reports a negative correlation between the provision of a kerbside recycling service and likelihood to reduce waste²⁰⁴. The author suggests that people who recycle regularly consider themselves to have done their bit, and therefore minimize waste at lower than average rates; he also suggests (in keeping with the findings from the SWAG survey above) that these respondents may think that their recycling behaviours actually are waste reduction behaviours in themselves.
- The use of **disposable nappies** is shown by a report on nappy choice by researchers at Surrey University to make up a significant proportion of domestic waste going to landfill²⁰⁵. That report cites a study analysing the contents of landfill sites which found that disposable nappies account for 4% by volume of all waste sent to landfill. The

²⁰³ Bedford 2003; Encams April 2003; Holdsworth July 2003

²⁰⁴ Barr September 2003

²⁰⁵ Uzzell & Leach September 2003

report also presents its own survey data, which show that roughly 80% of expectant mothers said they planned to use disposable nappies, with the reasons most commonly given for the intended nappy choice being it was the same as their own previous nappy choice (if they had had a baby before), or that it was based on a recommendation from another mother. Apart from habit (or 'recommended habits'), the study found convenience to be the strongest single factor in determining nappy choice.

4.2. Reuse

- The report on the SWAG survey of public attitudes identifies five types of **reusing behaviours**: direct reuse (eg. of scrap paper, envelopes, and plastic bags); recharging of batteries; refilling containers (eg. cleaning products); avoiding disposables (eg. nappies, paper tissues, razors); buying recycled products. 77% of respondents claimed to undertake at least one of these behaviours in their homes; however, the range of reusing activities was found to be relatively narrow, with 84% of 'reusers' reporting reusing plastic bags (even then, mostly as bin liners), and 34% reusing plastic drinks bottles. Beyond these two actions, few respondents engaged in reusing; roughly 0.1% of reusers reported buying recycled products. The report concludes that while the public understands reusing well, they only engage in one or two reusing activities; the other methods of reuse should be promoted. Infrastructural solutions are again recommended, in terms of product choice, and the provision of reconditioning services (eg. of furniture).
- The Demos report for Defra on public influencing techniques provides an account of the 'PlasTax' in Ireland, where a levy of €0.15 was placed on each plastic bag, and a law passed to ensure retailers passed the cost of that levy on to consumers²⁰⁶. This was accompanied by an advertising campaign; together they have led to a 90% reduction in the number of **plastic bags** consumed. Furthermore, a survey in Ireland in 2003 found that 91% of the public thought the PlasTax was a good idea. Survey data in the MORI Environment Bulletin 2003 states that 63% of respondents in the UK supported the idea of a 10p charge on plastic bags ("*as in Ireland*"), while 27% of respondents were opposed to the idea.

4.3. Recycle

- In a Waste Attitudes and Actions Survey commissioned by Surrey County Council, 71% of respondents reported **recycling** whenever possible, and only 5% of respondents said they had never thought about recycling²⁰⁷. In the Defra/ONS Quality of Life survey, 52% of respondents reported regularly recycling paper (making this the most commonly-recycled item), while 42% of all respondents reported regularly recycling glass²⁰⁸.
- The report on household waste behaviour in London by Brook Lyndhurst and MORI grouped survey respondents according their reported recycling behaviours. That survey found that 33% were 'high recyclers', 22% were 'medium recyclers', 26% were 'low recyclers', and 19% were 'non-recyclers'. 'High recyclers' partly defined themselves as such because they believed they were doing as much recycling as it

²⁰⁶ Demos November 2003

²⁰⁷ Lyons et al 2001

²⁰⁸ Defra/ONS September 2002

was possible for them to do; only around one-fifth of respondents felt they could do more recycling (the 'medium recyclers'). However, allowing for overclaiming, more than half of respondents were judged to be low level recyclers or not to be recyclers at all. The survey found reported recycling rates to be higher among more **affluent households**, and among those who considered themselves more 'green' (by the simple measure of whether they bought food ethically). The Defra/ONS Quality of Life survey also stresses that the rate of participation in recycling behaviours declines down the socio-economic classes.

- The Brook Lyndhurst waste survey found a correlation between recycling behaviour and **kerbside collections**, with 72% of those with kerbside collections reporting being 'high' or 'medium recyclers', while only 28% of households with such a service reported being 'low' or 'non-recyclers'. The Defra/ONS Quality of Life survey also stresses this link: among respondents who reported not recycling paper regularly, 25% said it was because they did not have kerbside collections, while among those who reported not recycling glass regularly, 28% said it was because they did not have kerbside collections (making this the reason most commonly given for not recycling glass). The statistical analysis of recycling and reducing behaviour by Stewart Barr came to the conclusion that the provision of a kerbside service was the biggest single factor predicting the behaviour of recycling.
- In the Brook Lyndhurst waste survey, 48% of households in London claimed to have access to a kerbside collection service. However those householders most likely to have kerbside collections were affluent, white, car-owning, house-owning 35 to 54 year olds. This finding is taken to show that all Londoners do not have an equal opportunity to undertake recycling; provision of kerbside collection services was found to vary widely from borough to borough. Sources also suggest that kerbside collection services are not without their **flaws**: the Brook Lyndhurst waste survey found that 70% of 'high' and 'medium' recyclers agreed that 'the council don't collect all the items I want to recycle', while in the SWAG survey, 19% of kerbside recyclers (spontaneously) suggested that the council should accept more types of item in kerbside collections.
- Stewart Barr concludes from his analysis that while reducing is a more marginal behaviour, recycling has almost become **the 'norm'** (in another paper he argues that it certainly is for upmarket groups²⁰⁹). One factor in spreading the habit of recycling, according to Stewart Barr, is the obviousness of the green box itself, telling other people that a person is recycling. In his statistical analysis, 'awareness of the norm to recycle' is shown to be a strong predictor of recycling behaviour. In the Surrey County Council survey, 19% of respondents said knowing that other people in the area were recycling would encourage them 'a lot' or 'a little' to start recycling. In Tracey Bedford's Sustainable Lifestyles report, those respondents who said they had kerbside recycling services all reported using them, but they also exhibited a sense of civic pride about the services when they were discussed in the focus groups²¹⁰.
- The Brook Lyndhurst waste survey reported that most people based their perception of whether they were recyclers on just two items: **glass and paper**. A large proportion of 'recyclers' were found only to recycle these two items; for instance, most of those who considered themselves 'high recyclers' reported never recycling plastic food wrappers

²⁰⁹ Barr et al 2003

²¹⁰ Bedford 2003

(64%) or aluminium foil (60%), whereas only 5% of these respondents never recycled newspapers, and only 10% never recycled magazines or glass bottles. Similarly, the SWAG survey found that newspapers were the most commonly-recycled item in Scotland, with 65% of respondents who were 'recyclers' claiming to recycle newspapers. Glass was nearly as commonly recycled, among 63% of recyclers, then a sharp gap appeared in the rates before cans (recycled among 29%), magazines (15%), plastics (12%), organic waste (8%) cardboard (5%) and textiles (5%). Findings from a segmentation study by Encams also support the view that most recyclers only recycle glass or paper²¹¹.

- In the Defra/ONS survey 58% of respondents said they did not recycle glass regularly, and 48% said they did not recycle paper regularly. In the case of both behaviours, 14% of those who reported not recycling regularly said they did not have the time, or did not want, to recycle; 18 to 24 year olds were most likely to give this reason for not recycling. In the SWAG survey 10% of non-recyclers said they were not sure why they did not recycle, and 5% said they were 'not interested'. An analysis of existing research evidence which is provided at the start of the Brook Lyndhurst waste report suggests that there is a **"hardcore"** of people who refuse to recycle, and that it could be as large as 10% of the public.
- In the SWAG survey, 50% of all respondents said that they were not currently recycling. When asked to identify **barriers** preventing them from doing so, 29% of non-recyclers said they 'don't know where the facilities are', 19% said recycling was 'too much trouble', while another 18% said they had to 'travel too far', 11% said they had no access to appropriate transport, and 6% said it took 'too much time'. In the survey for Surrey County Council 15% of all respondents (recyclers and non-recyclers) said they found it too difficult, 16% said that it took too much time, and 18% said they found it difficult to carry things to the recycling banks. The researchers in that study concluded that while most people recycled, it was regarded as not without difficulties. However, the Brook Lyndhurst survey in London found that for most people the reason why they did not recycle was that *"they simply did not think about it"*. That study also noted that people lacked local information about recycling, and suggested that such information might serve as a prompt to set people thinking about recycling.
- The survey for Surrey County Council also asked respondents who already recycled what would encourage them to **recycle more**: 54% of recyclers felt that a reduction to (or no increase) in council tax for recyclers would encourage them 'a lot' or 'a little' to recycle more, making this the top factor for these respondents. 47% of respondents said having more space to store recyclables would encourage them 'a lot' or 'a little' to recycle more, while 45% said that being provided with a house-to-house collection would encourage them 'a lot' or 'a little' to recycle more, and 21% felt that charging for collecting waste to landfill would encourage them 'a lot' or 'a little' to recycle more. Notably, 30% of recyclers reported that being sure recycling would benefit future generations would encourage them 'a lot' to recycle more.
- The 1999 MORI survey, cited in the report for the Cabinet Office, found that a third of respondents did not know **what** items could be recycled, and 38% did not know **where** they could recycle appropriate items locally. The proportions of respondents not

²¹¹ Encams 2002

knowing were higher among 'low' and 'medium' recyclers, and the report suggests that information is linked to recycling behaviour.

4.4. Compost

- The SWAG survey found that 20% of respondents reported home composting their garden waste, while 26% reported using a green waste collection service or taking their garden waste to the civic amenity site. Including kitchen waste, 22% of all respondents with gardens reported undertaking home composting. **Home composting** rates varied widely, according to the factors of garden size and type, gardening behaviours, rural or urban location, availability of a collection service, and finally, attitudes. 78% of all respondents were non-home composters, of whom 54% said that nothing could encourage them to compost at home, while another 10% said they were unsure. A segmentation study of the public by Encams found that composting habits were not seen by respondents as environmentally-related, but rather that they were undertaken by serious gardeners for their own benefit²¹². In the SWAG survey, only 5% of non-home composters said that provision of a free home composter would encourage them to start composting.

4.5. Littering

- Qualitative research for Tracey Bedford's study of Sustainable Lifestyles found that respondents' own environmental priorities were immediate and local; **litter** was the main concern voiced in this context, (along with fly-tipping and graffiti, local crime problems, dog fouling, and asylum seekers). A segmentation study of the public by Encams found that most respondents 'confessed' to dropping some litter, and they appeared to drop small items of litter habitually²¹³. In that study, most respondents saw cigarette butts and fast food wrappers as borderline items in terms of acceptability, while bits of tin foil, small bits of paper and apple cores were commonly seen as acceptable litter items. Many respondents felt the problem was mainly attitudinal, and called for better education about littering, with some older respondents blaming the young in particular. Other respondents felt the prevailing view of society was that ours is a "*throwaway world*".
- A survey of public attitudes for the Scottish Executive reported that 89% of respondents thought littering was '**a big problem**' (79% thought the same about dog fouling)²¹⁴. 70% of respondents thought litterers should be fined, and 50% thought more bins should be provided.
- In the Encams segmentation study, respondents spoke of **more bins** and **more fines** as the best ways to stop people dropping litter. More bins were seen as the council's responsibility, while fines were regarded as potentially effective, but seldom (if ever) enforced; the report states that it is vital that culprits are seen to be fined in order that the threat of action becomes real, and acts as a deterrent to littering.

²¹² Encams 2002

²¹³ Encams October 2001

²¹⁴ Hinds et al 2002

4.6. Sanitary Waste

- The study of the sustainability of routes for **sanitary waste disposal** reported that respondents were aware of the threats to the flow of the sewerage system through flushing sanitary waste, and of the health risks and aesthetic drawbacks of sanitary waste items on beaches and riverbanks²¹⁵. Nonetheless, respondents reported flushing these items, and seemed reluctant to change their behaviour. The study recommends that public awareness campaigns on the issue of flushing sanitary waste should be “*selective, locally-targeted, and utilising a wide range of public awareness campaign methods*”. Disposal bags should be provided, along with communications materials and formal and informal education activities.

5. Household Consumption – Food

- Tracey Bedford’s study of Sustainable Lifestyles presents the factors informing food choices as multiple and highly complex²¹⁶. She identifies seven principle considerations for sustainability (food miles; seasonality; level of processing; packaging; level in food hierarchy; biological scarcity; types of agriculture), and no fewer than 19 different environmental impacts relating to those considerations; the potential number of relationships between these **considerations and impacts** is vast. It is in the context of food that she says sustainable consumers live in a “*messy world*” where the pros and cons of different actions can contradict one another (for instance, organic food may have travelled a long way to arrive at the consumer: which food should a person buy?).
- The report on household waste behaviour in London undertaken by Brook Lyndhurst and MORI asked respondents about their food choices (in order to identify ‘green’ consumers as a subgroup in data analysis)²¹⁷. When making food purchase decisions, **quality** was the top criterion for 71% of respondents, ahead of cost (for 68%). Taste was ranked next (by 40%), and then special offers (by 29%). Convenience was cited by 27%, and then the brand by 17%. ‘Environmental considerations’ were seventh, cited by 12% of respondents.

5.1. Organic

- In the qualitative research for Tracey Bedford’s study of Sustainable Lifestyles, organic food was dismissed out of hand by respondents as **too expensive**. Qualitative research conducted for the DETR on the concept of Sustainable Development also found that most respondents regarded organic food as only for the well-off²¹⁸. In the Defra/ONS Quality of Life survey, 18% of respondents reported having bought organically-produced food, and this rate varied widely by social class: 34% of respondents in Class I (the top class) had bought organically-produced food while only 12% of those in Class IV (the second-bottom class) had done so²¹⁹.

²¹⁵ Ashley et al May 1999

²¹⁶ Bedford 2003

²¹⁷ Brook Lyndhurst 2002

²¹⁸ Irving January 1998

²¹⁹ Defra/ONS September 2002

5.2. Fairtrade

- (No relevant data are presented on attitudes to buying fairtrade.)

5.3. Food Miles

- (Some sources recommend buying seasonally, buying local produce, and using farmers markets; no data are presented on attitudes to such behaviours.)

5.4. Food Labelling

- In the NCC 'Green Choice: What Choice?' report, many respondents acknowledged that it was easy for them to ignore information, and that they often didn't **look at labels**, or if they did they couldn't understand what they meant²²⁰.

6. Household Consumption – General

- The Co-Op Bank's annual report on 'Ethical Consumerism' calculates the size of the ethical marketplace based on sales in ten '**ethical shopping**' categories: local shops; health food shops; fairtrade; products not tested on animals; vegan and vegetarian products; organic produce; non-genetically altered food; ethical money; recycling and second-hand; wood products and the FSC logo²²¹. However, in the 2003 'Ethical Consumerism' report an attempt is also made to calculate the value of the marketplace based on consumer's '**ethical intentions**', according to categories including shopping locally, using public transport, buying for re-use, and avoiding unethical products. (Two points should be made about these categorisations: first, that impact and intention are not the same – as noted in section iii) of this summary report – and that they provide overlapping frameworks; second, that many of the behaviours under 'ethical consumerism' relate to food consumption, such that this framework cuts across that provided by Tracey Bedford).
- The Co-Op Bank's first report on ethical consumerism ('Who are the ethical consumers?') featured survey data by MORI, which segmented the public into five types according to their relationship to ethical purchasing²²². The report identified two segments as **the core target** audience for ethical products; together these segments represented 11% of all consumers. When asked whether they felt their product choices could influence companies' behaviour, 11% of all respondents said they believed it could. The report also notes that, in group discussions, no segment of respondents was keen on being described as 'ethical consumers'.

6.1. Shopping locally

- The Co-Op Bank's 2003 report on 'Ethical Consumerism' reports that 19% of respondents who used their local shops claimed to do so chiefly to support the local community. However, in the DETR research on Sustainable Development, some

²²⁰ Holdsworth July 2003

²²¹ Co-op Bank 2003

²²² Cowe & Williams 2001

respondents were reported to regard **shopping locally** as inconvenient, with one respondent describing it as “*faffing about*”²²³. MORI survey data in the Brook Lyndhurst report on waste in London found that 92% of respondents reported shopping for food at the supermarket²²⁴.

6.2. Ethical Purchasing Decisions

- The Co-Op Bank’s 2003 report found that 52% of respondents reported having **boycotted** at least one product in the last 12 months.
- Data collected for the MORI **CSR** study in 2003 found that 25% of respondents make decisions about companies based on the quality of the products and services that a company provides, while only 4% of respondents agreed that they took the ‘environmental responsibility’ of a company into account, and only 3% took account of their ‘social responsibility’²²⁵. However, 74% of respondents agreed that if they had more information about companies’ social, environmental, and ethical behaviour this would influence their purchasing decisions.

6.3. Charity Shops

- The Co-Op Bank’s 2003 report revealed that 24% of respondents who reported shopping at charity shops claimed to do so primarily to support **a good cause**.

6.4. Packaging

- In the Defra/ONS Quality of Life survey, 12% of respondents indicated that, in the last 12 months, they had chosen not to buy a product because it ‘seemed to have too much packaging’. People tend to point the finger at manufacturers and retailers for there being **too much packaging**; for instance, respondents in the Encams segmentation study on littering said that it was harder not to litter nowadays, as there was so much more fast food, and packaging of all sorts than there used to be²²⁶. In the Brook Lyndhurst waste survey, 28% of respondents claimed to look for ‘low packaging’ items (while 38% said they did not); 59% agreed it was ‘impossible to avoid excess packaging’. The OECD report on sustainable household consumption recommends that ‘upstream instruments’ (ie. focussed on the supply-side) need to be applied to control the amount of packaging used by manufacturers, especially in view of the increased use of plastics and the current low rates of recovery for plastic materials²²⁷.

7. Housing

7.1. Land Use

- The study in the Netherlands of 9 household consumption behaviours by Gatersleben and Vlek asked respondents about their willingness to undertake behaviour change,

²²³ Irving January 1998

²²⁴ Brook Lyndhurst 2002

²²⁵ MORI January 2004

²²⁶ Encams October 2001

²²⁷ OECD 2002

and found that ‘moving to a **smaller house**’ was the least acceptable of the nine behaviours tested: 63% of respondents were not willing to do so²²⁸.

7.2. Habitable Standards

- Qualitative research with the general public conducted for Barrow Borough Council found that housing was felt to be one of the most **urgent problems** facing Barrow²²⁹. Respondents called for the 11% of housing which was deemed uninhabitable to be “*eliminated*” at the first opportunity. This finding exemplifies the need identified by Tracey Bedford for the poor environmental conditions faced by disadvantaged people to be tackled head on, rather than them working their own way to a better quality of life through undertaking the behaviours in a sustainable lifestyle²³⁰. (However, in this framework, the behaviours required to obtain habitable housing are more likely to resemble those of sustainable communities rather than sustainable consumption, to be undertaken through groups.)

8. Tourism

8.1. Eco-tourism

- The OECD report on sustainable household consumption considers the impacts of tourism travel, and suggests that the public is generally unaware of and unconcerned about the impact of their travel choices²³¹. Green tourism (or eco-tourism) is described as a **niche market**, but is seen to be growing.

8.2. Holidays

- The OECD report on sustainable household consumption recommends that people take **fewer (potentially longer) holidays**, and calls for an increase in domestic tourism (which is noted to be prevalent in countries with many second homes, like France). However, in the Gatersleben and Vlek study of 9 household consumption behaviours, 48% of respondents said they were not willing to take ‘holidays nearer to home’²³².

9. Leisure

- (While this ‘consumption cluster’ is identified in Tracey Bedford’s study of Sustainable Lifestyles, none of the sources in this desk research study provides a breakdown of behaviours within this cluster.)

²²⁸ Gatersleben & Vlek 1998

²²⁹ Rose-Troup 2001

²³⁰ Bedford 2003

²³¹ OECD 2002

²³² Gatersleben & Vlek 1998

10. Banking

10.1. Ethical investments

- (The Co-Op Bank's 2003 report on 'Ethical Consumerism' provides market data on two types of ethical investment: 'green' mortgages; personal deposits in ethical banks. No data are presented on public attitudes to these behaviours.)

11. Participation

- (It should be noted that the sources included in this study provide little evidence of public attitudes to community participation; the outlines below focus on defining the behaviours in these groups, and are unable to discuss barriers and drivers, in the absence of evidence.)

11.1. Civic Participation

- In the Home Office Citizenship Survey 2001, '**civic participation**' is defined as an individual engaging in at least one of nine activities: signing a petition; contacting a public official working for a local council; contacting a public official working for the GLA or Welsh Assembly (where applicable); contacting a public official working for central government; contacting a local councillor; contacting a member of the GLA or Welsh Assembly (where applicable); contacting a Member of Parliament; attending a public meeting or rally; taking part in a public demonstration or protest²³³. 38% of respondents in the Survey had undertaken at least one of these activities in the last year, although the report notes that a minority of respondents were involved across a number of these activities. Signing a petition was the most commonly reported of these activities, with 58% of those who had been involved in civic participation having done so; this was followed by contacting a council official (38%), contacting a local councillor (24%), attending a public meeting or rally (18%), and contacting an MP (13%).
- The Home Office indicators of 'active community participation' (as defined in the Citizenship Survey) do not include some key 'civic participation' actions for sustainability identified elsewhere in the sources. The CDF framework of 14 factors to measure the "*extent and quality of community life*" includes measures of an individuals' 'involvement in governance', which are described as forms of "*vertical involvement*"²³⁴. These are **voting turnout**, and levels of response to **consultations**. The GO East report on renewable energy and the planning process would serve as a reminder that involvement in the **planning** process should be included among 'vertical' forms of 'civic participation' (perhaps as a subset of 'responding to consultation')²³⁵.

²³³ HO RDS September 2003

²³⁴ Chanan April 2004

²³⁵ GO-East October 2003

11.2. Social Participation

- ‘Social participation’ is also measured by the Home Office Citizenship Survey (although it is not included as an indicator for the ‘active community participation’ target). The authors stress that “*social participation is distinct and should not be confused with informal socialising*” (see below under ‘Neighbourliness’). **Social participation** is defined as being a member of a group, club or organisation; this includes playing in a team, or belonging to a campaigning organisation. The Survey finds that 65% of the sample were involved with groups on at least one occasion in the last year, while 52% were involved in groups at least once a month. It should be noted that if participating in a group for social reasons entails providing help or services free of charge to that group, then it is defined by the Home Office Survey as ‘formal volunteering’ (and is relevant to the ‘active community participation’ target).

12. Volunteering

12.1. Informal Volunteering

- In the Home Office Citizenship Survey 2001, **informal volunteering** is used to describe an individual giving help to someone outside the family without being paid²³⁶. In 2001, 67% of respondents had been informal volunteers at least once, with 34% having volunteered informally at least once a month. Twelve types of informal volunteering are identified in the Survey, with the most commonly-undertaken action being giving advice to someone (among 46% of informal volunteers), ahead of looking after a property or pet for someone who is away (by 41%), transporting or escorting someone (31%), babysitting or caring for children (29%), keeping in touch with someone who has difficulty getting out and about (28%), doing shopping, collecting pensions or paying bills for someone (26%), writing letters or filling in forms for someone (23%), cooking, cleaning and doing chores for someone (17%) and decorating or doing DIY for someone (16%).

12.2. Formal Volunteering

- In the Home Office Citizenship Survey 2001, **formal volunteering** is used to describe an individual giving help to others or to the environment through organisations such as groups or clubs, without being paid. 39% of respondents reported being formal volunteers at least once in 2001; 27% had been formal volunteers at least once a month. Considering the types of groups that people gave help to as formal volunteers, 34% of formal volunteers were involved in sports or exercise groups, 30% were involved in schools or children’s learning groups, 25% in arts or social groups, 23% in religious groups, 18% in youth groups (outside school), 16% in health or social welfare groups, 15% in local neighbourhood or community groups, and 12% in environmental groups or those concerned with animals.
- The CDF Guide for **Community Groups** by Chris Church provides many examples of the types of activity undertaken by these small local groups²³⁷; these activities are arranged under the (SD-related) headings of “*A Better Environment*”, “*A Better Local*

²³⁶ HO RDS September 2003

²³⁷ Church 2003

Economy”, and “*Better Social Conditions*”. Included under the heading of ‘A Better Environment’ are recycling groups, reconditioning groups (who work on repairing furniture and electrical goods), energy saving groups, ‘Friends of Our Park’ groups, ‘community gardens’ associations, and local cycling and walking groups. Within the section of the Guide on ‘A Better Local Economy’ social enterprises, credit unions, local exchange trading schemes (LETS) and ‘time banks’ are included. Finally, ‘Better Social Conditions’ is said by Chris Church to cover “*just about everything*”, and in many cases to involve community groups working in partnership with local authorities to deliver their activities and services. Examples of community groups working in this area include Health and Environmental Action Groups, community crime prevention groups, food co-operatives, community cafes, and Allotment Associations.

- Concerning variations in formal volunteering among **different subgroups**, the Home Office Citizenship Survey found that rates were similar by variables of gender, but varied by age: the over 65s were the least likely age range to be formal volunteers, while the young (under 25s) were notably shown to be average, or even above average volunteers (for instance, 40% of under 25s were formal volunteers in 2001, against 39% of the whole sample). Black Africans were the most likely single group to have undertaken formal volunteering at least once in 2001 (among 44%), ahead of 39% of Black Caribbeans, and Whites, and Indians, and 31% of Pakistanis and Bangladeshis. The report finds that respondents from more affluent households, and those with higher educational qualifications, were more likely to be involved in volunteering. Attitudinal factors also impacted on formal volunteering, with those who ‘definitely’ enjoyed living in their neighbourhood more likely to have undertaken such activity (41%) than those who enjoyed their neighbourhood ‘to some extent’ (36%), and than those who did not enjoy living there (32%).
- Considering the **potential interest** among respondents in becoming formal volunteers, the Home Office Citizenship Survey found that 44% of those who had been involved several times in the past year, and 43% of those who had been involved more than 12 months ago, would like to be more involved in formal volunteering. 27% of those who had never been involved said they would be interested in doing so for the first time. Looking at these findings by ethnicity, Black respondents were far more likely to be interested in getting involved (or more involved) than were White respondents, and somewhat more likely than were Asian respondents. For instance, 41% of Blacks who had never been involved in formal volunteering said they were interested in doing so (as opposed to 25% of Whites and 39% of Asians). Across respondents from all groups who expressed an interest in volunteering more, or who had not volunteered recently or ever, time commitments (for 34%) were the main **barrier** to formal volunteering, along with personal circumstances, including parenting and caring (26%) and work or educational commitments (25%).
- The report on the Home Office Citizenship Survey comments that when **triggers** to formal volunteering were investigated, the preferred methods were shown to be “*personal, local, and low-tech*”, and usually involved existing relationships. The most common route in for those who had volunteered formally in the previous year was encouragement from someone already in the group (44%). An introduction through school, college or university was next most common (20%), ahead of a person having encountered the group first as a user of their services (18%). While these rates did not vary widely across different ethnic groups, the next most common route in for all respondents, that through a place of worship (church, chapel, mosque, synagogue or

temple), very much did. While 13% of formal volunteers had followed this route, 36% of Black formal volunteers had done so, making it the single most common route in among formal volunteers in those groups (ahead even of personal contact, among 35% of Blacks). The research by Encams around the clean-up in Handsworth observed that most of the (ethnically-diverse) participants had been mobilised via faith groups²³⁸.

12.3. Civic Service Volunteering

- A paper on the 'Citizen's Audit of Britain' presents data regarding individuals' voluntary involvement in delivering civic services²³⁹. This category of community involvement, which is not measured in the Home Office Citizenship Survey, could be described as '**civic volunteering**'. The paper on the Citizen's Audit includes in this group of behaviours: serving on a jury, giving blood, joining the local Neighbourhood Watch scheme, helping out in the local park, volunteering for Meals on Wheels, serving as a school governor, and serving as a local councillor.

13. Neighbourliness

- ('Neighbourliness' is not included in the 'active community participation' indicators in the Home Office Citizenship Survey, but the Survey measures levels of 'informal socialising' in a separate chapter under the heading of 'People's involvement in their neighbourhoods'.)

13.1. Informal socialising

- The Home Office Citizenship Survey 2001 measures 'informal socialising' through one question, asking about the number of times in a week people go out to meet others, or have people round to their house²⁴⁰. 26% of all respondents said they had friends or neighbours round to their house at least several times a week, while 21% said they went round to friends' or neighbours' houses several times a week; 16% went out with friends or neighbours several times a week. These data were shown to vary by age (with under 25s socialising in these ways most frequently), but also by ethnicity (Pakistani and Bangladeshi respondents were most likely to have people round to their house several times a week, 36% and 37% respectively). The lower a respondent's household income, or the more deprived the area in which they lived, the more likely they were to say they 'never' socialised in these ways.

13.2. Intervention for the common good

- The Home Office Citizenship Survey relates this type of behaviour to one question only: 'what did you do the last time you saw someone drop litter in the street?'. In answer to this question, 39% of all respondents chose the option 'I ignored the litter', 25% indicated 'I picked it up myself', and 15% indicated 'I asked the person to pick it up themselves'. Men were more likely than women to say they ignored the litter (44% of men said so), while women were more likely than men to have picked it up themselves (28% of women said so).

²³⁸ Encams April 2003

²³⁹ Whiteley March 2004

²⁴⁰ HO RDS September 2003

- Elsewhere in the Home Office Citizenship Survey, a question is asked about whether an individual would feel it likely that their wallet or purse would be returned to them 'intact' if they lost it. The findings are used as a measure of how much an individual trusts people in his or her community. If the question were asked the other way round ('if you found a purse or wallet...would you return it intact?') it would offer a useful measure of an individual's willingness to 'intervene for the common good'. (Other behaviours of this type could include preventing someone from driving drunk, or reporting a crime that had been witnessed to the police.)

13.3. Noise pollution

- (Noise abatement is one of the more difficult behaviours to position in a framework of behaviours for a sustainable lifestyle. In the Defra/ONS 'Quality of Life' Survey it appears under 'Other actions that people might take around the home'; however it does not appear in any of the frameworks of household consumption behaviours.)
- The Defra/ONS Quality of Life Survey asked respondents about 'making sure that your noise did not disturb others'²⁴¹. 74% of respondents reported having made efforts not to disturb other people with their noise on a regular basis over the past 12 months.

²⁴¹ Defra/ONS September 2002

Recommendations

In the light of the evidence above, the following recommendations are made for Defra:

- If a policymaker's ultimate aim is to change a behaviour, he should set out to change that behaviour, and ideally persist until the changed behaviour has become a habit.
- Behaviour change initiatives should be based on a package of measures; ensure that any physical or infrastructural ('external') barriers are addressed first, then address attitudinal and psychological ('internal') factors through informational or educational measures.
- Responsibility for bringing about public behaviour change should be shared by government (and its public sector or VCS partners) with individuals, rather than be devolved onto them.
- Different groups of the public will respond to different combinations of measures; a targeted approach should be adopted to behaviour change campaigns.
- In using communications tools to drive behaviour change, messages should be kept simple, and focused on the behaviour in question (or a very few behaviours in question).
- The primary role of communications in behaviour change campaigns should be to provide the public with supporting information that will help them adopt the new behaviour in question; effective types of communication include local information (eg. on recycling facilities or community groups), promotional materials (eg. on energy saving grants) and feedback (eg. on the impacts of recycling).
- The 'exploratory framework for a sustainable lifestyle' proposed here is not intended for use as a model lifestyle to which the public should be exhorted to aspire; the framework should also be strengthened (through the use of expert workshops or other techniques) in order to make it as robust as possible, before it is carried forward for use elsewhere.
- Explore the appeal of the concept of (sustainable) 'lifestyles' with the public through qualitative research, to establish whether it has a part to play in informal education or behaviour change campaigns for sustainability.
- Explore the role of individuals, and their behaviours and attitudes, in relation to 'sustainable communities' (ie. build an evidence base similar to that on 'sustainable consumption'); work with those local and national government bodies and their partners who are engaged in neighbourhood renewal and local sustainability, in order to provide a better quality of life for all.
- Heighten the profile of community involvement in SD communications work, and explore the potential for working with (and funding) community groups in order to support public behaviour change for sustainability.

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