

Incentives for Householders to Change their Waste Practices

Final Report

A report produced for the Scottish Executive

Andy Maunder & Veronica Sharp, AEA Technology
Marion Croy & Gregor Pennie, Enviromentor

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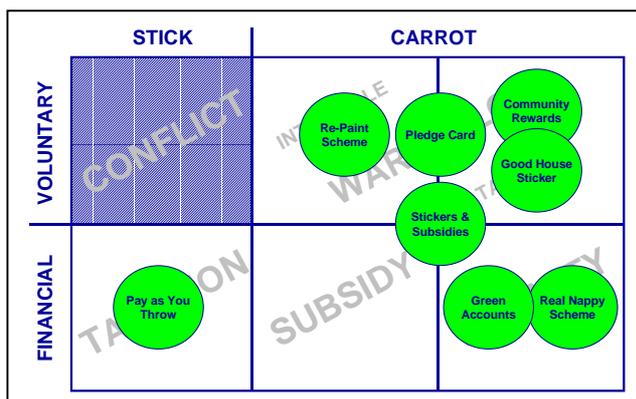
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Executive Summary

The integrated National Waste Plan (NWP) for Scotland, incorporating eleven Area Waste Plans (AWPs), was launched by Ross Finnie, Minister for the Environment and Rural Development, on 24 February 2003. As part of the National Waste Strategy for Scotland¹ the plans provide a roadmap towards sustainable waste management and set quantifiable targets to reduce dependence on landfill and improve Scotland’s poor recycling performance. Not only are approaches to waste collection and management addressed, but so too are support initiatives such as waste reduction, recycling market development and promotion and education programmes.

To achieve the new targets fundamental shifts in householder attitude and behaviour are required in Scotland. To fast-track the process of culture change necessary, the Scottish Executive commissioned research into “Incentives for Householders to Change their Waste Practices”.

A range of incentives was researched encompassing both voluntary and financial schemes. These were categorised using the following framework:



The framework demonstrates the following approaches:

Voluntary/Stick

Reliant on voluntary action but tries to achieve that by threat of a penalty.

Voluntary/Carrot

Aimed at changing behaviour by appealing to good nature and community spirit.

Financial/Stick

Operating through legislation/taxation/policy.

Financial/Carrot

Discounts, subsidy, or tangible rewards.

The research identified the following core themes:

- ◆ **Lifestyle Attributes** - Incentive schemes need to appeal to the wider lifestyle attributes of the target audience, e.g. attitudes, opinions and interests (beyond waste issues).
- ◆ **Infrastructure** – Incentive schemes need to have the appropriate facilities and support mechanism in place, e.g. collection scheme, bring sites and recycling centres. In addition, clear ‘how to’ information needs to be provided.
- ◆ **Stakeholders** – Use of stakeholders will help provide endorsement, extend the incentive scheme reach and maintain momentum.
- ◆ **Voluntary Action** – Positive feedback provided on consequences of action serves to further commitment rather than use of fiscal incentives which were not universally accepted.

¹ <http://www.sepa.org.uk/nws/>

This report presents the findings of the research conducted and provides a recommended action plan for implementing potential incentive schemes to encourage householders in Scotland to improve their waste practices.

Glossary

ACORN	A Classification Of Residential Neighbourhoods
AWP	Area Waste Plan
Community Re>Paint	Unwanted, surplus paint is diverted from the waste stream and redistributed for re-use by community groups, charities and voluntary organisations
COSLA	Convention of Scottish Local Authorities
Landfill tax	A tax applied to waste disposed of at landfill sites that is intended to encourage waste recovery/recycling and a move towards less environmental harmful disposal methods
NGO	Non-Governmental Organisation
NWP	National Waste Plan
NWSS	National Waste Strategy for Scotland
Real Nappy Schemes	Schemes aimed at reducing the waste created by disposable nappies by promoting use of traditional nappies for washing at home or as part of a nappy laundry collection and delivery service
Recycling centres	Larger recycling facilities such as Civic Amenity Sites (CAS) where a range of household waste can be taken and sorted into different types for recycling and disposal
Recycling points	Also known as “bring sites” e.g. bottle banks which are located in convenient places such as supermarket car parks
Reverse vending	Schemes where cash back is given for returning bottles and containers to encourage re-use rather than disposal
RRF	Resource Recovery Forum
SEPA	Scottish Environment Protection Agency
Stakeholders	Referring to all interested parties who are affected by an incentive scheme and can support its implementation. For example: local media, schools, voluntary and community groups, local businesses, etc.
SWAG	Scottish Waste Awareness Group
WAS	Waste Aware Scotland

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1 Introduction

Scottish Waste Awareness Group (SWAG) - delivering the "Waste Aware Scotland" programme

It is widely recognised that to achieve the new targets fundamental shifts in attitude and behaviour are required in Scotland. To address this need the Scottish Waste Awareness Group² (SWAG) is delivering the "Waste Aware Scotland" programme. An initial report - "Public Attitudes to Reduce, Reuse, Recycle in Scotland" – presents a baseline assessment of attitudes and behaviours towards waste issues derived from over 5000 door to door interviews³. Campaigns are now being developed on specific waste management issues and will be run concurrently with the implementation of the Waste Strategy Area plans.

"Incentives for Householders to Change their Waste Practices"

In support of this work, and to try and fast-track the process of culture change necessary in Scotland, the Scottish Executive (through the SEPA Sponsorship and Waste Department) commissioned a desk and market research project into "Incentives for Householders to Change their Waste Practices". AEA Technology Environment, in collaboration with Enviromentor, was selected to conduct the study under the guidance of a Steering Group – see Table 1.

Having reviewed the SWAG research and other relevant studies, this report presents the findings of the research conducted and provides a recommended action plan for implementing potential incentive schemes to encourage householders in Scotland to improve their waste practices.

An illustration of how the desk research and focus group findings were combined into this report is shown in Figure 1.

Specific aims and objectives of the project are presented in Section 1.1.

² <http://www.wascot.org.uk/main.htm>

³ Copies of the report can be requested via info@wascot.org.uk

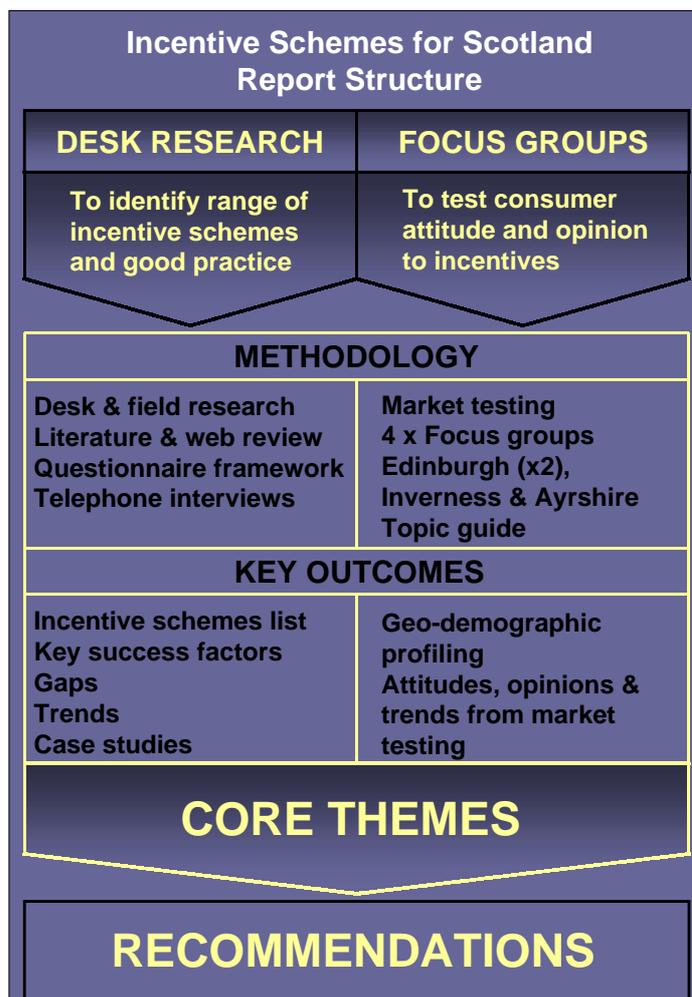
Table 1: Members of the Steering Group

Name	Organisation
Karen Anderson	West Lothian DC, representing COSLA
Jim Baird	Glasgow Caledonian University
Michaela Clellan	Scottish Environmental Protection Agency
John Forbes	Waste and Resources Action Programme
Iain Gulland	Recycling Advisory Group
Nicki Souter	Scottish Waste Awareness Group
Charles Stewart Roper	Scottish Executive
Peter Brown	Scottish Executive
Euan Carmichael	Scottish Executive

Findings, themes & recommendations

The desk and field research findings were combined with the feedback obtained from the focus groups, thus enabling a set of core themes to be identified. From these themes a list of recommendations was developed.

Figure 1-1: Illustration of Report Structure



1.1 AIMS AND OBJECTIVES

Specific aims and objectives of the project, and how they were addressed in the subsequent approach taken, are highlighted in Table 2 below.

Table 2: Project Aims and Objectives

Specific Objectives	Task And Approach Taken
1. To review the results of existing research into international patterns in the application of incentives to change householder behaviour to reduce, reuse and recover waste.	<p style="text-align: center;">Task 1: Desk Research</p> <p><i>Incentives (sources and providers) were identified, catalogued and categorised. A list of 10 studies for further review was submitted to the Steering Group for approval.</i></p>
2. To review results from the Scottish Waste Awareness Group (SWAG) waste survey and the Scottish Executive’s national household survey.	
3. To draw up a list of possible measures to provide incentives to households in Scotland.	
4. To consider the viability and success of incentives to encourage Scottish householders to separate their waste.	<p style="text-align: center;">Task 2: Field Research</p> <p style="text-align: center;">Task 3: Evaluation and Gap Analysis</p> <p><i>A range of incentives were reviewed through in-depth interviews with incentive providers and campaign managers. Effectiveness and viability were measured. Gaps in current incentives provision were considered and a short list of possible incentive schemes was developed.</i></p>
5. To identify a short list of possible incentives and to establish the potential for pilot projects for particular options.	
6. Carry out focus group research to establish the views of members of the public so as to explore the viability of the short list of measures.	<p style="text-align: center;">Task 4: Market Testing</p> <p><i>Attitudes to incentives identified were tested with householders from city and rural communities through the use of focus groups.</i></p>
7. To suggest possible routes for incentives for householders in Scotland to improve their waste practices.	<p style="text-align: center;">Task 5: Recommendations and Final Report</p> <p><i>Recommendations are provided in this report stating how The Scottish Executive and SEPA can integrate relevant incentives in the implementation of the National Waste Plan.</i></p>

2 Methodology

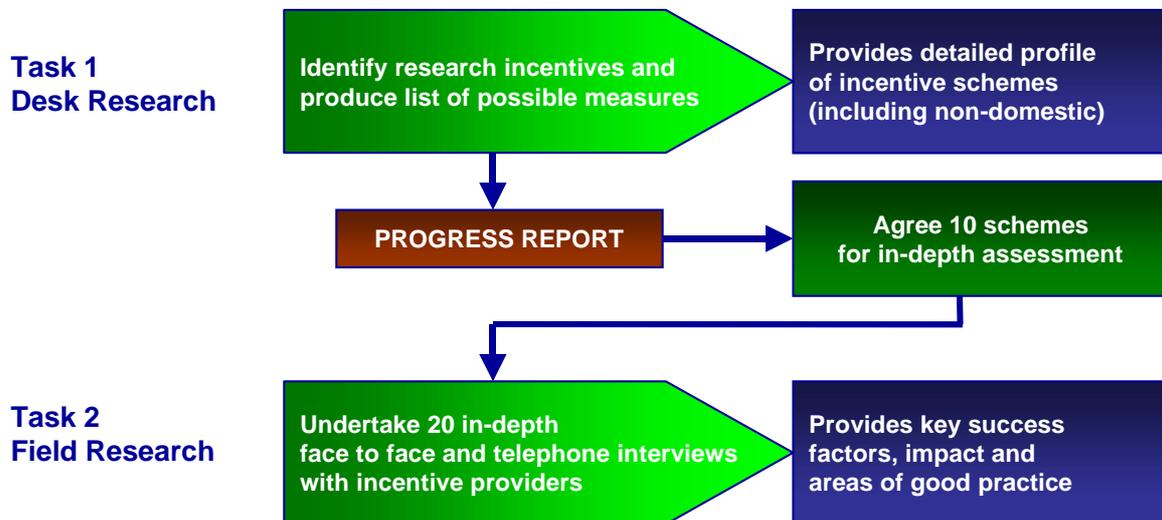
Programme of Work A Programme of Work was agreed with the Steering Group at a project initiation meeting held at the Scottish Executive, Victoria Quay, Edinburgh on 23 October 2002. This section describes the methodology used for undertaking the following:

- research into existing incentive schemes (to be conducted by AEA Technology – Section 2.1); and
- market testing through four focus groups in Scotland (to be led by Enviromentor – Section 2.2).

2.1 INCENTIVE SCHEME RESEARCH

Figure 2-1 illustrates how the incentive scheme research was conducted.

Figure 2-1: Approach to Desk and Field Research



Task 1 A comprehensive review of waste-related incentive schemes was undertaken utilising in-house knowledge and web-research. Details of this research can be found as follows:

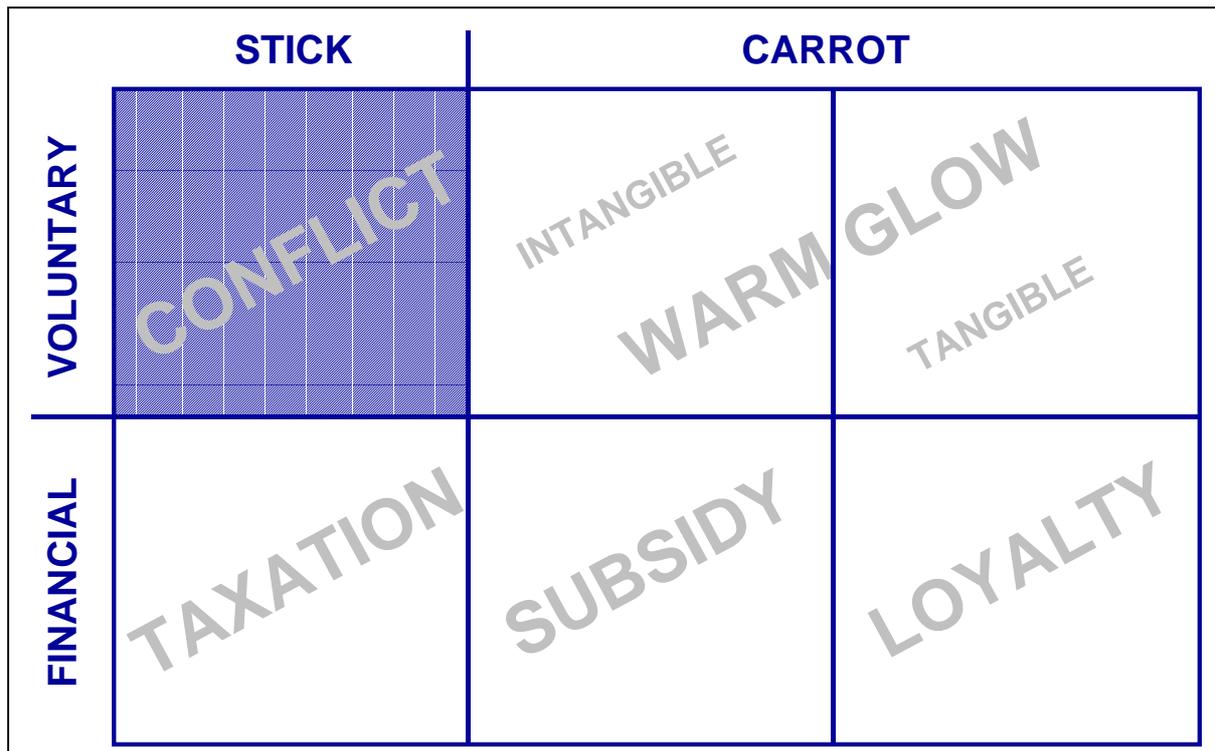
- Appendix 1: List of reports reviewed and personal contacts made.
- Appendix 2: List of UK, European and international incentive schemes and campaigns (where incentive schemes have featured).

A framework for categorising the schemes (identified in Appendix 2) was developed. This framework highlighted two key themes:

- the schemes offering financial or voluntary benefits;
- the schemes offering direct rewards or penalties for in-action.

The framework below (Figure 2-2) was used to map the incentive schemes and assisted in identifying a shortlist for in-depth review.

Figure 2-2: Categorisation of Incentive Schemes



The framework demonstrates:

- Voluntary/Stick**
 - that a scheme reliant on people taking voluntary action but tries to achieve that by threat of a penalty is likely to fail and cause conflict between the parties concerned;
- Voluntary/Carrot**
 - voluntary incentive schemes aim to change behaviour by appealing to people's good nature and community spirit without the need for direct financial incentives;
- Financial/Stick**
 - a scheme offering financial incentives might operate through the threat of direct taxation;
- Financial/Carrot**
 - a scheme can offer financial incentives through discounts, subsidy, or tangible rewards.

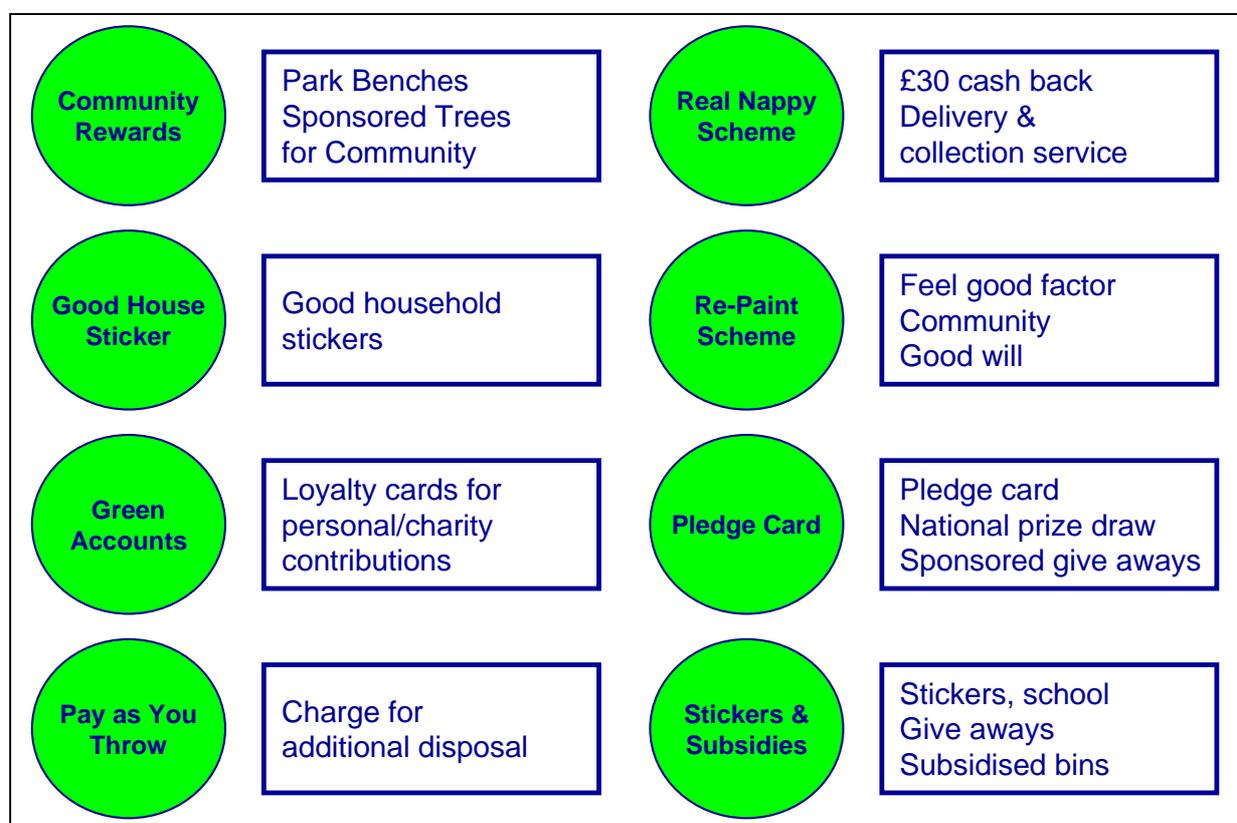
2.1.1 Shortlist of Incentive Schemes

Developing the shortlist

Following the initial mapping exercise eight incentive schemes were selected. These covered each of the categories and encompassed a wide variety of techniques that might be successful in demonstrating a ‘perceived’ value (i.e. a feel good factor, or ‘personal’ gain) that inspires people to take action. These were agreed by the Steering Group for in-depth assessment. In addition two reports were proposed for further review⁴.

A summary of the incentive schemes selected for review is shown in Figure 2-3.

Figure 2-3: Summary of the Incentive Schemes Reviewed



Task 2

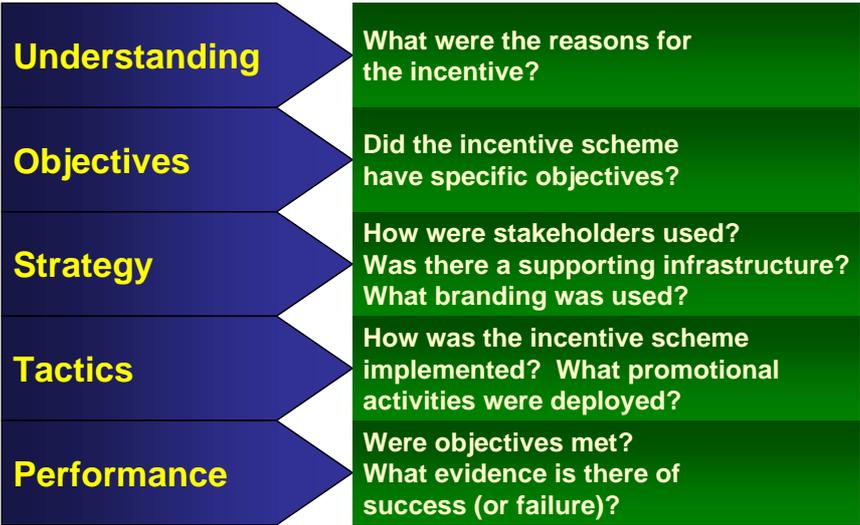
In-depth research was conducted on the eight schemes, via telephone interviews with key scheme personnel. Qualitative and quantitative feedback on the lessons learned from each of the schemes was obtained. Relevant issues arising from these reports have been distilled into the key outcomes in Section 3 where appropriate.

⁴ Household Waste Behaviour in London, Resource Recovery Forum, Brook Lyndhurst Ltd, MORI, 2002; Local Authority Waste Charging Scheme, Best Practice Evaluation Study, Enviros Aspinwall, July 2000

**Use of an
Assessment
Framework**

An assessment framework (based on a methodology advocated by the Chartered Institute of Marketing) was adopted. Figure 2-4 summarises the key areas that were reviewed and a full version of the framework is included in Appendix 3.

Figure 2-4: Illustrative Summary of Assessment Framework Utilised



2.2 MARKET TESTING

Focus Groups

Four Focus Discussion Groups were agreed with the Steering Committee. These were conducted among members of the general public (householders) living within the selected postcode areas KA3 Kilmarnock, EH6 Leith, IV1 Inverness and EH12 Edinburgh.

The focus group areas represent a number of demographic characteristics including professional, managerial, trade and manufacturing backgrounds and retired individuals. The areas are also diverse in their social and financial mix covering affluent, high unemployment and cosmopolitan areas. Table 3 provides a summary of the demographic profiles derived for the focus groups.

Table 3: Demographic Profiles of Selected Focus Group Areas

	Ayreshire (KA3)	Edinburgh (EH6)	Inverness(IV1)	Edinburgh (EH12)
Housing	Council flats, terraced	Council estates	Home owning	Home owning, converted flats
People groups	Single pensioners	Single parent families, ethnic, elderly	DINKY, elderly	Elderly, single, ethnic
Income	Low	Low	High	Highly affluent
Employment	High unemployment	High unemployment	Average	Average
Skills	Manufacturing	Service	Service	Service
Education	Semi-skilled and unskilled	Unskilled, secretarial and clerical	Well educated	Well educated
Mode of transport	Public transport/foot	Public transport/foot	Own car	Own car/foot
Media	Tabloid	Tabloid	Broadsheet	Broadsheet

Recruitment

Invitations to 520 potential participants in the research areas were sent by letter with an explanation of the project and the purpose of the proposed research exercise with a response mechanism. Research using a commercial database provided named individuals in each of the postcode areas.

In order to achieve a sufficient level of response, potential participants were telephoned who had responded positively to the invitation letter, or were part of the commercial database, to encourage attendance. The number of telephone calls made comprised of:

- KA3 - 92 calls of which 27 responses were negative;
- EH6 - 64 calls of which 14 responses were negative;
- IV1 - 80 calls of which 28 responses were negative; and
- EH12 - no calls were required and 2 individuals responded to say they were unable to attend.

A letter of confirmation was sent out at least two weeks prior to the meeting and a subsequent telephone call was also made to attendees immediately prior to the date of the meeting to confirm attendance and availability of the target interviewees. This time-consuming task is not unusual when working with focus groups and, for many individuals, participating in an environmental research exercise, however important, is not a high priority.

Response

The quickest and most enthusiastic response was from the EH12 postcode

area, where a reserve waiting list was easily established. The poorest response was from the KA3 postcode where only 9 respondents replied and on the evening of the focus group, which was very cold with icy conditions, 4 individuals attended. Almost full numbers of attendance were obtained at all the remaining Focus Group sessions.

The percentage responses in Table 4 below include those who expressed a willingness to participate even if they were unable to attend a Focus Group and would be willing to be interviewed by some other method separately.

Table 4: Response Rate to Focus Group Invitations

Focus Group	Number of individuals contacted	Number Recruited	Percentage of Recruitment
1	130	9	7%
2	130	13	10%
3	130	12	9%
4	130	14	11%
Total	520	48	9.25%

In overall terms, a 9.25% response is satisfactory for this kind of exercise and would prove to be more than adequate at supplying the study with meaningful information. As it can be seen from Table 5, 32 individuals participated in the focus groups.

Table 5: Dates, Locations and Numbers of Attendees at the Focus Groups

Date	Location	Venue	Address	Confirmed	Attended
7 th January	Ayrshire	Fenwick Hotel, Shield Room	A77 Ayr Road, Fenwick, Kilmarnock KA3 6AU	9	4
9 th January	Edinburgh	Malmaison Hotel, Mal 1	1 Tower Place, Leith EH6 7DB	12	10
15 th January	Inverness	Ramada Jarvis Hotel, Conservatory	Church Street, Inverness IV1 1DX	11	8
16 th January	Edinburgh	Capital Moat House, Clermiston suite	Clermiston Road, Edinburgh EH12 6UG	11	10

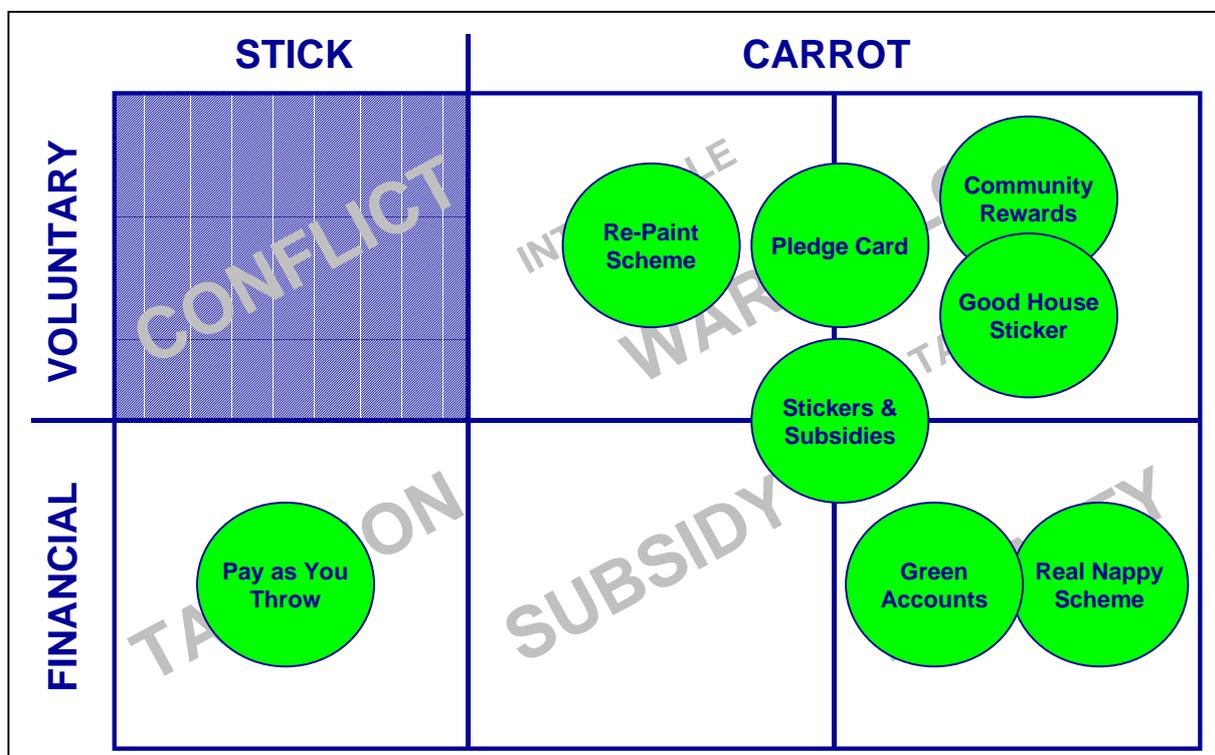
3 Key Outcomes

This section represents the key outcomes arising from the incentive scheme research and market testing.

3.1 INCENTIVE SCHEME RESEARCH

Figure 3-1 illustrates where the eight incentive schemes are represented within the categorisation framework.

Figure 3-1: Mapping of schemes reviewed onto categorisation framework



An assessment of the scheme categorisation is presented below:

Voluntary/Carrot

Voluntary incentive schemes aim to change behaviour by appealing to people's good nature and community spirit without the need for direct financial incentives. These schemes need to engender a 'feel good' factor but equally rely on the principles of convenience and capability. For example, making recycling easier (i.e. less effort and time cost), typically through the introduction of kerbside recycling, is commonly perceived as a solution. This is exemplified by the use of 'Good House' stickers as part of the Braemar Community Composting Scheme.

According to the London RRF report, people want to know that their efforts are making a difference and being appreciated, however small those

efforts may be. Rushmoor Borough Council developed the idea of rewarding a particular area or street for its recycling efforts with a cash reward to be spent on something for the community such as a bench or a tree.

Other incentive schemes of this nature include:

- the Leicestershire based Re>paint scheme appeal to those charitable people who wish to help others.
- A recent study in Canada, revealed that by describing in literature exactly how to take action, people could clearly envisage what the change means and will be happier to comply as a result.

Financial/Stick

While charging directly for waste services is currently not allowed in Scotland (apart from green waste collections) variable charging is in force in other countries. Some examples include:

- “Stick” approaches include the European “Pay As You Throw” (PAYT) schemes. This has been very successful in reducing the amount of waste put out for collection. The PAYT scheme in Italy led to residual waste falling by about 18% with source separation rate increasing by around 8%.
- Councils in Canada have found that the variable charging for waste increased recycling by up to 40%.
- A two pence charge on plastic bags at a Canadian supermarket resulted in 60% of shoppers reusing their plastic bags.
- The Braemar Community Composting Scheme study found that householders did not want restrictions put on how much waste they produced, nor did they want “strict adherence to rules that made little sense to them”. Most had used amenity sites or tips for disposing of bulky or recyclable items, but there was confusion as to whether uplifts for bulky items were charged for or free.

Financial/Carrot

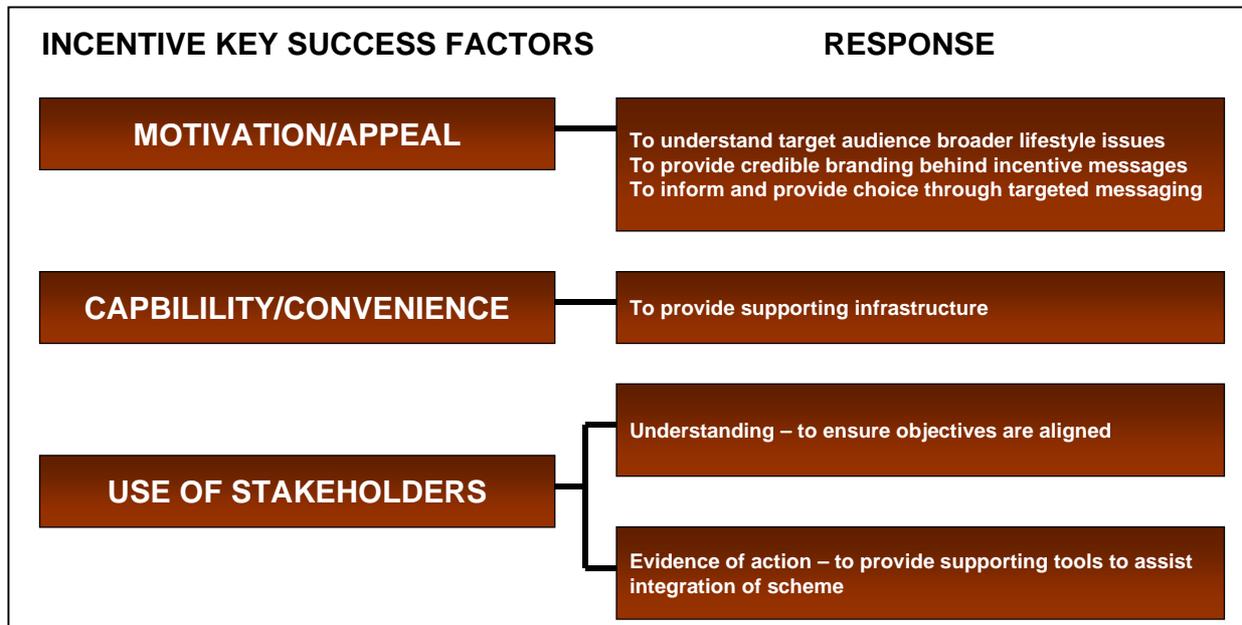
Most schemes in this category rely on the “carrot” approach, through a cashback award for participation and encouraging people to recycle materials in return for cash respectively. The research from the London RRF Survey revealed that “People need a financial incentive to recycle more”. Examples of this include:

- “Green Accounts Scheme” managed by Environ in Leicestershire. This successful scheme has been running for over eight years and provides “cash in return for trash”.
- A bring back scheme in London (Lambeth housing estate) offered a £10 reward to householders. 50% of householders participated with proof of participation derived from postcards unique to each address posted in a box at the bring banks.
- West Sussex Real Nappy Initiative in return for using real nappies offered £30 cashback. The scheme was promoted in baby changing rooms in Mothercare and Tesco’s.

3.1.1 Key Success Factors of Incentive Schemes Reviewed

A series of key success factors were derived from the research interviews conducted. These are summarised in the following diagram.

Figure 3-2: Key Success Factors Identified for Incentivisation

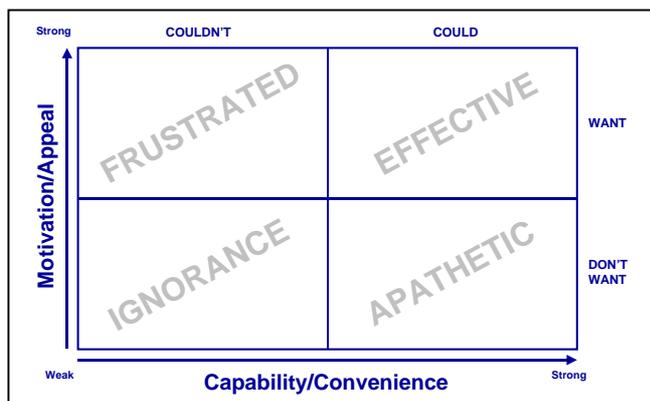


3.1.2 Evaluation & Gap Analysis

The key success factors identified above were used to assess the strengths and weaknesses of the eight incentive schemes. Gap analysis charts (illustrated below) were developed so that the individual schemes could be categorised and shortcomings identified.

Figure 3-3: Gap Analysis Charts

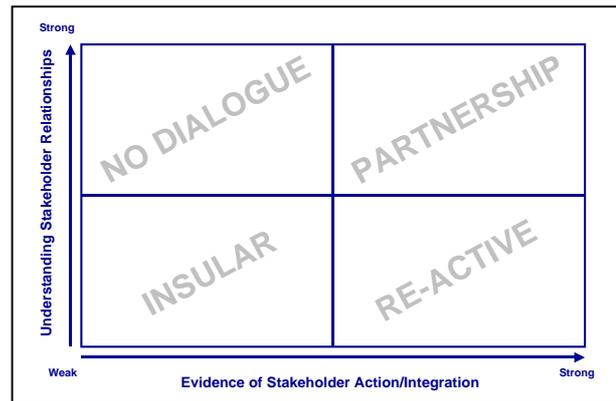
Motivation vs Infrastructure



Schemes aimed at raising awareness but do not provide the necessary supporting infrastructure will lead to a frustrated target audience unable to carry out the intended action. Alternatively a poorly promoted scheme with an excellent delivery system in place will simply result in lack of understanding and commitment.

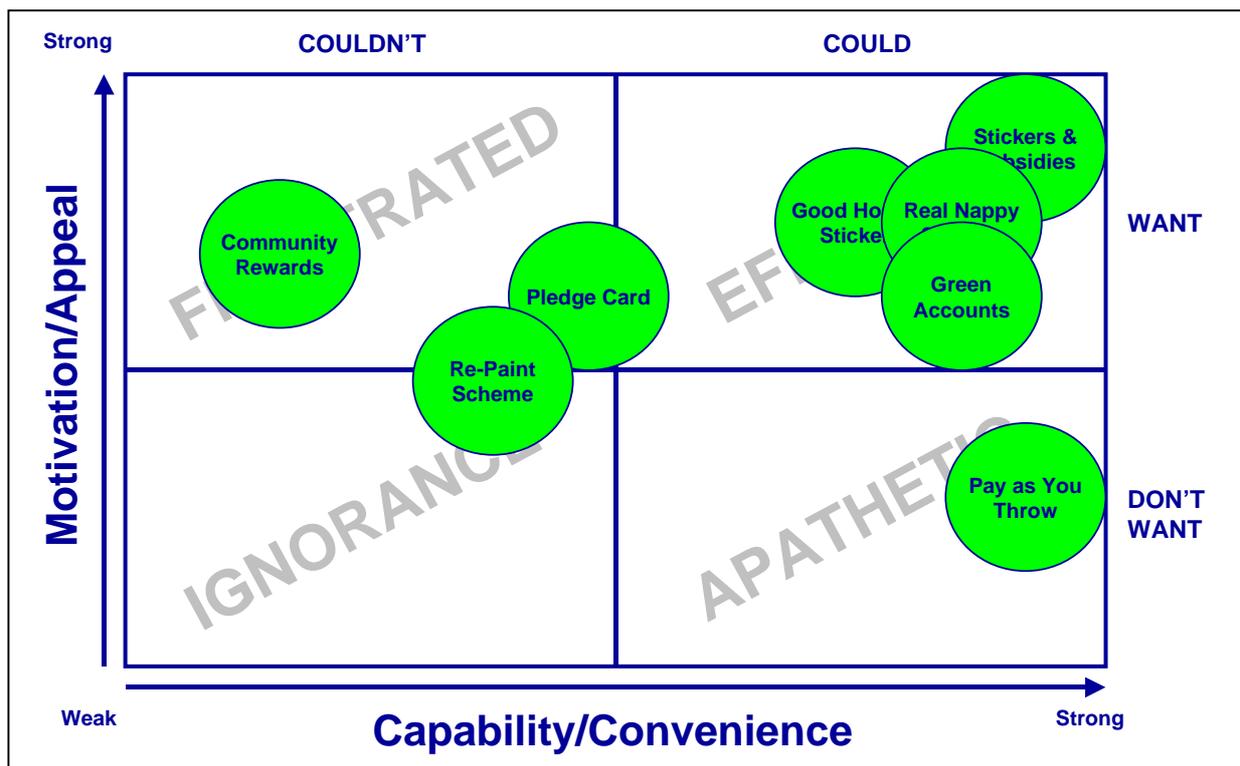
Stakeholders

To help the target audience take part in the incentive scheme, stakeholders provide an important and cost effective communication channel. Therefore, the emphasis should be on ensuring stakeholder understand the aims of the incentive scheme and are capable of providing the relevant support to the scheme. This often goes beyond the traditionally associated stakeholders relating to waste issues.



Scheme assessment The eight incentive schemes were evaluated against the key success criteria, weighted and scored to provide an assessment of how well each scheme performed. This is presented in the completed mapping exercises in Figure 3-4 and Figure 3-5.

Figure 3-4: Motivation/Appeal vs Capability/Convenience



Evaluation of Effectiveness The analysis above suggests that, of the incentive schemes reviewed, the four featuring in the top-right 'effective' box have been most successful. For each of the other schemes it is possible to identify a gap that needs to be addressed to increase effectiveness. For example, the community reward scheme has encountered significant difficulties due to the inability

to conveniently monitor localised recycling performance. This restricted the ability to assign the rewards to the best performing local communities.

3.1.2.1 Motivation/Appeal

Target Audience All of the incentive schemes reviewed had a target audience in mind, e.g. mothers (Real Nappy Scheme), women (in control of household routines – London RRF report), gardeners (Community Composting). Only a few conducted detailed demographic profiling to determine wider lifestyle factors.

Messages The messages used in the incentive schemes varied according to the type of scheme. However, most are clear and well defined both in terms of what the campaign is about as well as on the promotional media material such as websites or leaflets.

Branding/Logo A brand provides the target audience with something they can identify the incentive by as it serves as a “call to action” reminding the target audience of what the incentive scheme is about.

Many of the incentives analysed had a distinctive brand and/or logo. For example:

- Incentives run under the Bristol-based Rubbish Revolution banner used a dominant logo/slogan;
- America Recycles Day – to reinforce brand values. This logo was developed nearly ten years ago and is used in the media, printed materials, marketing and merchandising materials.



3.1.2.2 Capability/Convenience

Infrastructure (Tangible Services) A supporting services infrastructure is necessary to support the call-to-action. This could be in the form of manning a desk to a call centre and help line (depending upon the budget and coverage of the incentive scheme).

Examples include:

- Green Accounts ‘self-funding’ scheme using a team of less than five people;
- Bristol-based ‘Stickers/Subsidies’ (Rubbish Revolution) using a team of up to 20 people with three year funding provided by Bristol City Council.

Servicing the incentive scheme is an important factor in any campaign. All too often, many people are keen to recycle, but lack of readily available information source (such as a helpline) deters them.

**Infrastructure
(Facilities)**

There is little point in creating lots of awareness and willingness amongst the target audience if there are no facilities in place. Unfortunately, this aspect of recycling campaigns in particular is too often overlooked. “Lack of facilities” was commonly cited as a reason for non-participation in the London RRF report. The “Green Accounts” campaign cited problems relating to infrastructure whereby, many recyclers wished to recycle more materials, such as plastic bottles and tetra packs. However, markets for the latter are only available in Scotland.

The Rubbish Revolution campaign had a practical educational programme in schools and was linked to incentives (stickers/subsidies). A recycling infrastructure gave the people of Bristol the means to do their recycling effectively.

**Quality and Clarity
of Information**

According to research conducted for the Braemar Community Composting Study, all the record-setting incentive schemes and campaigns had a strong education, publicity and outreach programme. These included leaflets, fact sheets, feedback on progress, recycling guides, newsletters, posters, television, radio and newspaper adverts, hotlines, public service announcements, booths at community events, and more recently web sites.

America Recycles Day makes available a designated contact person on their website who is normally available 10 hours per day, five days per week, with the ability to give assistance to those with recycling questions. Over 50% of householders surveyed in the London RRF report did not know what could and could not be recycled, with those that did developing their knowledge about what and where to recycle from bring banks.

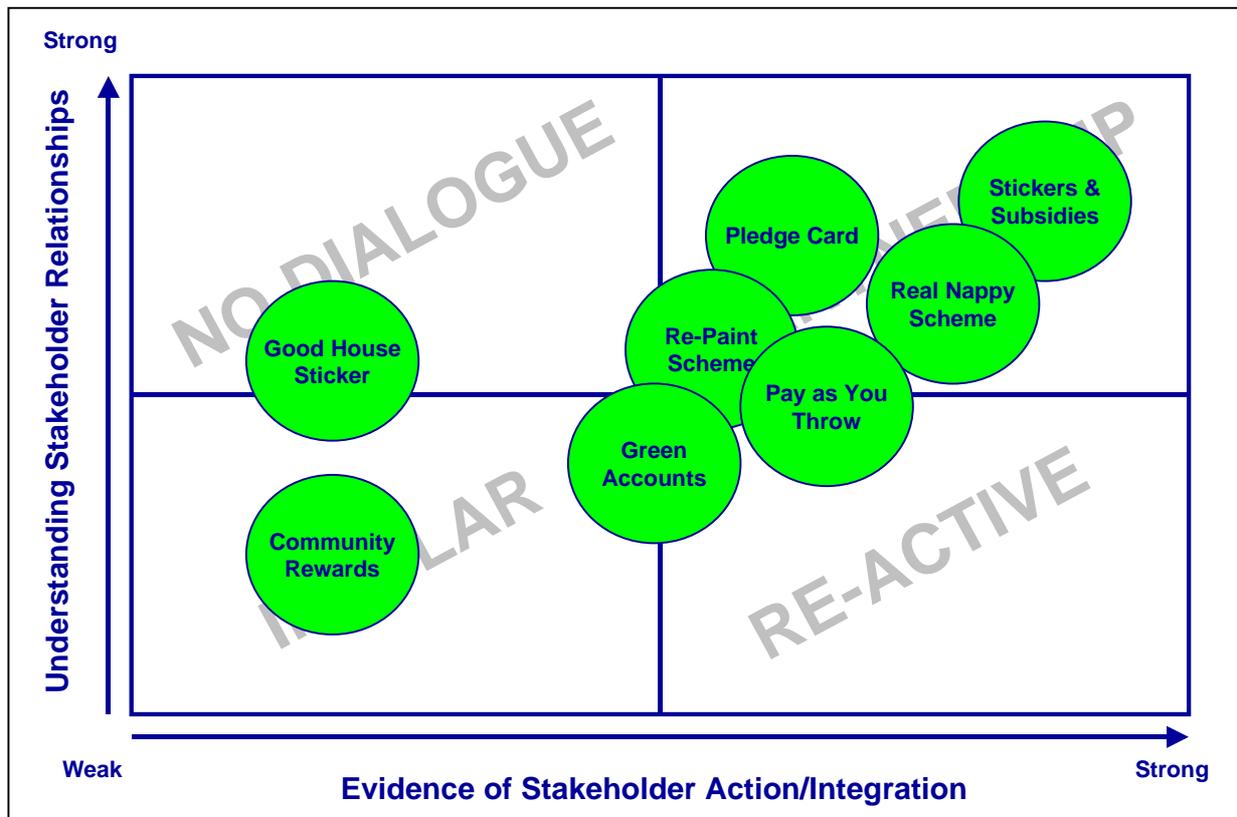
Clear information as to the location of recycling facilities is also a factor. In a recent report by SWAG, 22% of respondents were unsure as to where facilities are and “lack of information” about recycling was a common complaint about recycling in the focus groups undertaken as part of the RRF research.

Incentives, such as stickers and notices to clarify segregation and recycling uncertainties, should be near the point of action to be most effective.

3.1.2.3 Stakeholders

The analysis of stakeholder engagement, presented below, suggests those schemes appearing in the top-right box will be more successful. For example, the ‘Stickers & Subsidies’ scheme featured relies on a fully-integrated partnership approach with several organisations taking collective responsibility for the success of the incentives being offered.

Figure 3-5: Scheme Performance - Level of Stakeholder Engagement



Stakeholders

If objectives can be presented beneficially to stakeholders, they can potentially become very powerful partners in promoting the scheme and help to extend the reach and help to influence the target audience. The stakeholders involved in the America Recycles Day included state representatives and national sponsors who were encouraged to provide development ideas for incentives and to provide the incentive when available. All stakeholders, including the NGOs and government agencies provided promotional assistance via print and radio medium.

Similarly, the UK Community Repaint scheme in operation in Leicestershire is part of a national network of such schemes that are sponsored by Biffaward, ICI Dulux, and the Community Fund (formerly the National Lottery Charities Board). Here, stakeholder involvement is visibly important, providing sponsorship and hence, a valuable resource for setting up the scheme, training staff and producing information material. Stakeholders may also offer the target audience some reassurance that the scheme is official, reputable and trustworthy.

3.1.2.4 Other General Review Findings

Control / Measurement

Statistics and other monitoring instruments are often used to quantify the success or failure of an incentive scheme. However, some incentive

schemes such as America Recycles Day consider that a social change programme is difficult to define in terms of numerical goals. However quantifiable results are provided via web hits, web visits, newspaper clip numbers, state events, number of participants, etc.

Bristol's Rubbish Revolution campaign set a series of SMART (Specific, Measurable, Achievable, Realistic and Time-bound) targets. As a result they were able to provide year-on-year evidence of the impact of their campaign by providing a breakdown of key performance indicators for the quantitative targets that were set annually.

***Funding/ Duration -
"What constraints
were there in setting
up the campaign?"***

A familiar response from the interviews concerned time, resources and money! Many of those incentive schemes analysed were government funded. Some, for example, were funded by Landfill Tax Credits and others from the money saved on disposal costs (Real Nappy Initiative). Some schemes are self-funded such as the "Green Accounts" project run by Environ.

***Market Research &
Objectives***

Many of the incentive schemes conducted initial market research to determine not only whether an incentive scheme or campaign is needed but also to establish the target audience. In recent years, however, the need to reduce, reuse and recycle waste has become very apparent. Consequently, market research is now typically used to provide feedback on attitudes and barriers that need to be addressed by any proposed campaign. Market research also provides information on the people most responsible for household recycling.

3.2 MARKET TESTING

Four Focus Groups were conducted

The aims of each Focus Group were easily achieved with consensus reached on most of the issues raised. The participants were lively and interested even when numbers were small. Everyone participated fully and genuinely allowing frank and free discussions to take place.

Key Findings

Analysis of the information provided a number of discrete findings from which the following key issues and information concerning incentive schemes have been extracted. The information represents the views of the participants, who took part in the discussions, and may not necessarily represent all views of Scottish householders. A copy of the full report, including the topic guide used to facilitate the Focus Group discussions, can be found in Appendix 4.

This section summarises the key findings within the following areas:

- Key incentives to change motivation and behaviour;
- Constraints (or barriers) to change;
- Attitudes to incentives held by householders.

3.2.1 Waste And Recycling – Incentives To Change Behaviour

What Drives Behaviour?

Factors identified to influence behaviour were diverse and included:

- Nature and nurture,
- Class and culture,
- Peer pressure,
- Society,
- Consideration for other people,
- Concern for the environment,
- Childhood and parents' behaviour.

The law, government or regulatory organisations were not identified as influential and were not discussed by any of the Focus Groups. Response on how to change behaviour, from poor practice to good practice, was mixed. Use of “carrots and sticks” (rewards and punishments) was thought to be unimportant as an incentive to change behaviour and a clear preference for reward over punishment was apparent at all groups. Incentives to change behaviour were viewed to be short-term, but for long-term changes access to knowledge, better education and culture change were highlighted.

National Campaigns and Incentives

The Focus Groups found difficulty in identifying successful national campaigns, which changed their behaviour, without using prompts. The exception was the Drink-Driving campaign, which was raised at one of the four Focus Groups. Unsuccessful campaigns were more easily identified,

such as anti-litter and anti-smoking. Similarly, participants were generally unable to identify retail incentives, such as loyalty cards, money-off vouchers and buy-one-get-one-free schemes without prompting. Most did not use these schemes, a few individuals expressed a dislike for them and of the schemes used, petrol tokens were the most frequently used.

Incentives to Encourage Recycling

The participants had strong opinions about what incentives would change their recycling effort. Each of the four Focus Groups independently stated that the greatest incentive would be to have a kerbside collection scheme and all participants unanimously agreed that if provided, they would all use the facility to recycle waste. Some individuals felt that no other incentive would be necessary. Similarly, better access to recycling points (i.e. nearer to householder, no transport required, easier to recycle) would also increase recycling.

Most people living in Scotland want to recycle their household waste but say there are not enough facilities allowing them to do so, according to the latest surveys. However, Scotland's actual recycling rate suggests that those surveyed in Scotland (in common with many other polls) tend to over-estimate their own recycling performance.

Financial Incentives

There were mixed views on how effective financial incentives were to encourage recycling, both within Focus Groups and across the groups. One reason for this could be explained by the personal experiences of the participants. For example, some of the participants had lived in Germany, Canada and the USA and these individuals tended to do more recycling than the other members of their Focus Groups. They also had strong opinions on how financial incentives could be introduced into Scotland. Direct financial incentives, such as deposit schemes and reverse vending were generally supported in all focus groups. However, taxation or charging schemes were not.

Variable charging schemes were viewed as unfair for larger families and for poorer householders. Concerns were also expressed that unpaid waste charges, through variable charging or tagging systems, would lead to unauthorised dumping or litter and the tax payer would pay additional costs to clean up for non-payers.

From previous research studies and surveys, opinion is almost evenly divided on whether direct payment per bag or bin would be fair, though a majority typically thinks charging would be worse than the present system. The young and more affluent are less likely to oppose charging.

Householders were unaware about how much waste disposal cost them as part of their community charge. Estimates ranged from £1/week to £10/week, although most were not able to give a figure. All participants were surprised at how little the cost was (approximately 50p/week) and most were prepared to pay more. A rebate of Council Tax for recycling was not considered an incentive, in view of the small sums involved.

Direct financial incentives⁵, which were suggested included:

- Deposit schemes for bottles (5p-25p),
- 10% deposit on plastic bottles and aluminium cans at the point of sale (scheme operates in USA),
- Reverse vending at supermarkets for cans, plastic, paper, glass, with choice of cash-back, money-off grocery bill, or donation to charity (schemes operate in USA).

Community Incentives

These types of incentives were overwhelmingly viewed to be more desirable and effective than financial incentives, but reassurance that money will be donated as promised is required. Ideas suggested by the Focus Groups included:

- Charity donation to local schools or hospitals from savings,
- Donation to impoverished children,
- Charity donation to Oxfam for cans,
- Donation to children in the community,
- Donation to local parks from recycling revenue,
- Street collection donations to charity.

3.2.2 Reducing, Reusing And Recycling Waste – Barriers To Change

Barriers to Reduce Waste

It was generally felt that the best way to reduce householders' waste was at source and many householders make an effort to reduce waste at the point of sale. For example, participants used traditional shopping bags or bags-for-life, refused extra or excessive bags and some even left unwanted packaging at supermarket check-outs.

Consumer choice was discussed as a mechanism to reduce waste at source. Choosing loose fruit and vegetables, rather than pre-packed goods was common across all groups. In addition, choosing long-life products, such as low energy light bulbs and reusable nappies were raised as examples. Three of the participants had children, which used or had recently used reusable nappies, purchased on environmental grounds. All had stopped using the nappies, for various reasons, such as incompatibility with nursery requirements. Incentives, such as cash or voucher schemes, would not have influenced whether to continue using reusable nappies in all these cases.

It was felt that supermarkets, retailers and manufacturers needed to take more responsibility for reducing the amount of packaging used, which eventually ends up in the household. Specific ideas were raised to do this. These included:

- Set up system to leave or take packaging back to supermarket checkout,
- Green dot scheme (scheme operates in Germany),
- Legislate to enforce retailers to take back packaging,

⁵ Future work in this area will link in with the work currently being carried out to reduce waste with businesses by Scottish Enterprise and the Waste Management Initiative (WaMI).

- Tax plastic bags in the supermarket (scheme operates in Ireland),
- Reduce packaging for organic products (often have more packaging than non-organic products).

Reducing waste in the home was more difficult for the participants to identify. Examples, such as composting organic waste and the use of a waste disposal unit were used by only a minority of the Focus Group participants. Many householders felt that they would be willing to compost organic waste, if a free compost bin were provided.

Barriers to Reuse Waste

Reuse of waste was often confused with recycling, but once explained, it was clear that many of the householders already reused waste within their homes. Examples included the reuse of plastic carrier bags to contain domestic and pet waste, the reuse of jiffy bags, jars and screws.

Barriers to Recycling Waste

The key barriers to recycling were identified as poor general awareness and lack of knowledge about the benefits of recycling. More widely available information about what happens to waste when it has been recycled, how much it is worth and what new materials or products can be made from recycled waste is required. It was felt that improved education and awareness about the value of recycling to the householder, the community, government and the environment would in itself be an incentive and motivate people to do more and reinforce to those who do recycle, that they are doing something beneficial. For example, if landfill tax is saved through recycling effort, what would this be worth financially, to the government and the local community? How much could be used to support environmental projects in a specific area?

In addition, lack of confidence that wastes are being recycled and not dumped was a barrier for some participants. For others, not knowing what can be recycled or how it can be recycled was also identified as a barrier. It was suggested that simple information, perhaps in the form of a circular information dial could be provided to every household. Each segment could represent a waste recycling solution, and this could be produced for each local area.

3.2.3 Responsibility For Promoting Incentives

Who is Responsible for Promoting Incentives?

The government and local council were identified as the key organisations for promoting incentives to reduce, reuse and recycle waste in all Focus Groups. It was suggested that government should be responsible for policy and the local authority for carrying out the policy. Others also mentioned included the Minister for the Environment, supermarkets, manufacturers, schools and SEPA.

How to Promote Successes

There was a consensus across all Focus Groups that the key mechanisms for promotion were television, radio and newspapers. In some areas, community newsletters would also be appropriate.

3.2.4 Key Findings from Market Testing

**Conclusion –
Reaction**

In terms of time, participants spent a total of almost 50 hours and engaged in significant and meaningful discussion of the topics covered. Again, this is very significant in market research terms and demonstrates the level of interest in and commitment to environmental issues by those who participated. Each session was recorded throughout, and at the end of the discussion, interviewees expressed a keen interest in a continuing involvement in the study and a request to learn more of the initiative.

The direct quotes below are spontaneous reactions by the Focus Group participants. These are all the comments received, some of which were provided by more than one participant.

**Key Incentives to
Reduce Household
Waste**

- Ease
- Knowledge about the benefits
- Consumer choice

**Key Incentives to
Recycle More
Household Waste**

- Ease
- Education
- Kerbside collection scheme
- Understanding the value

**Take-home Message
to Project Sponsors**

- Clear up the mess
- Adults and children need better education about how and what to do as individuals
- There is a will to do more
- Choose a few initiatives, rather than one
- Raise awareness
- Practice what you preach
- Don't reinvent the wheel – learn the lessons from others
- Provide facilities to recycle vegetable oil
- Provide appropriate recycling points or centres for plastic recycling
- Cut down producers – cut down manufacturers
- Education – Education – Education
- More litter bins – more recycling bins
- Put a deposit on the basics – or the Scottish Executive is not going to meet its targets
- This needs big messages – be imaginative and bold – we have to take it seriously
- I want to leave my packaging behind in the supermarket
- Cut down packaging on organic produce – it has to be wrapped to make sure it's organic
- All schools should have their own recycling bins.

4 Core Themes

Recurring themes

From the desk research and market testing conducted a number of recurring themes were identified. This section examines the most pertinent of these with a view to determining specific recommendations for implementation in Scotland. The following core themes were identified:

- **Lifestyle Attributes** - Incentive schemes need to appeal to the wider lifestyle attributes of the target audience, e.g. attitudes, opinions and interests (beyond waste issues).
- **Infrastructure** – Incentive schemes need to have the appropriate facilities and support mechanism in place, e.g. collection scheme, bring sites and recycling centres. In addition, clear ‘how to’ information needs to be provided.
- **Stakeholders** – Use of stakeholders will help provide endorsement, extend the incentive scheme reach and maintain momentum.
- **Voluntary Action** – Positive feedback provided on consequences of action serves to further commitment rather than use of fiscal incentives which were not universally accepted.

4.1 THEME 1: LIFESTYLE ATTRIBUTES

Determination of lifestyle factors

It can be seen from this research that a number of studies, reports and surveys have been conducted into public attitude and behaviour towards specific waste issues. Familiar trends can be seen from these reports but few, if any, relate specifically to incentive schemes and to any analysis of the target audience’s wider lifestyle issues.

In the commercial field significant market research, profiling and target audience segmentation is conducted before launching a new product or service. The associated promotion and advertising is then tailored to appeal to the perceived needs and values of the target audience in order to shift attitude and behaviour towards product purchase. This concept is equally applicable to the implementation of incentives to change householder behaviour to waste.

The commissioning of this research goes some way to addressing this issue.

4.2 THEME 2: INFRASTRUCTURE

Capability and convenience through infrastructure

One of the most common barriers identified in the reports, interviews and focus groups is the lack of infrastructure available to carry out the intended action. This can typically be the lack of a kerbside collection for recyclables or lack of local bring sites or recycling centres. No matter how good awareness and motivation are heightened a scheme is destined to fail without the appropriate facilities in place.

The most desired voluntary intervention, stated in surveys and reports, is the provision of kerbside recycling and improved information. To support the facilities, clear information is required on how, what and where to recycle.

In addition, tangible services and tools to support use of the facilities are required to maintain commitment to action.

4.3 THEME 3: STAKEHOLDERS

Partnership approaches

Some of the most successful incentive schemes have achieved endorsement from a wide range of stakeholders. Through respected key target groups can be addressed that might otherwise be disinterested. Examples of such stakeholders include the media, sports and leisure groups, trade and professional bodies, trade unions and commercial organisations. A number of successful regional activities have benefited significantly from heightened PR and media coverage such as local news and radio stations who themselves have signed up to the campaign.

4.4 THEME 4: VOLUNTARY ACTION

The “feel good” factor

Of the schemes researched, community and charitable incentives, which engendered a ‘feel good’ factor, were preferred to fiscal measures which were not universally accepted.

Positive Feedback

Reinforcement by providing positive feedback on consequences of action can appeal to closely held values and beliefs. This feedback serves to further an individual’s commitment to action. Examples of this include the approach of campaigns such as Amnesty International and Comic Relief where information is provided on the positive effect a donation to a particular cause has brought. In the latter case the annual evening of comedy entertainment is regularly interspersed with brief, informative documentaries that show where previous donations have gone and the benefits they have brought about.

Awareness, Motivation and Participation

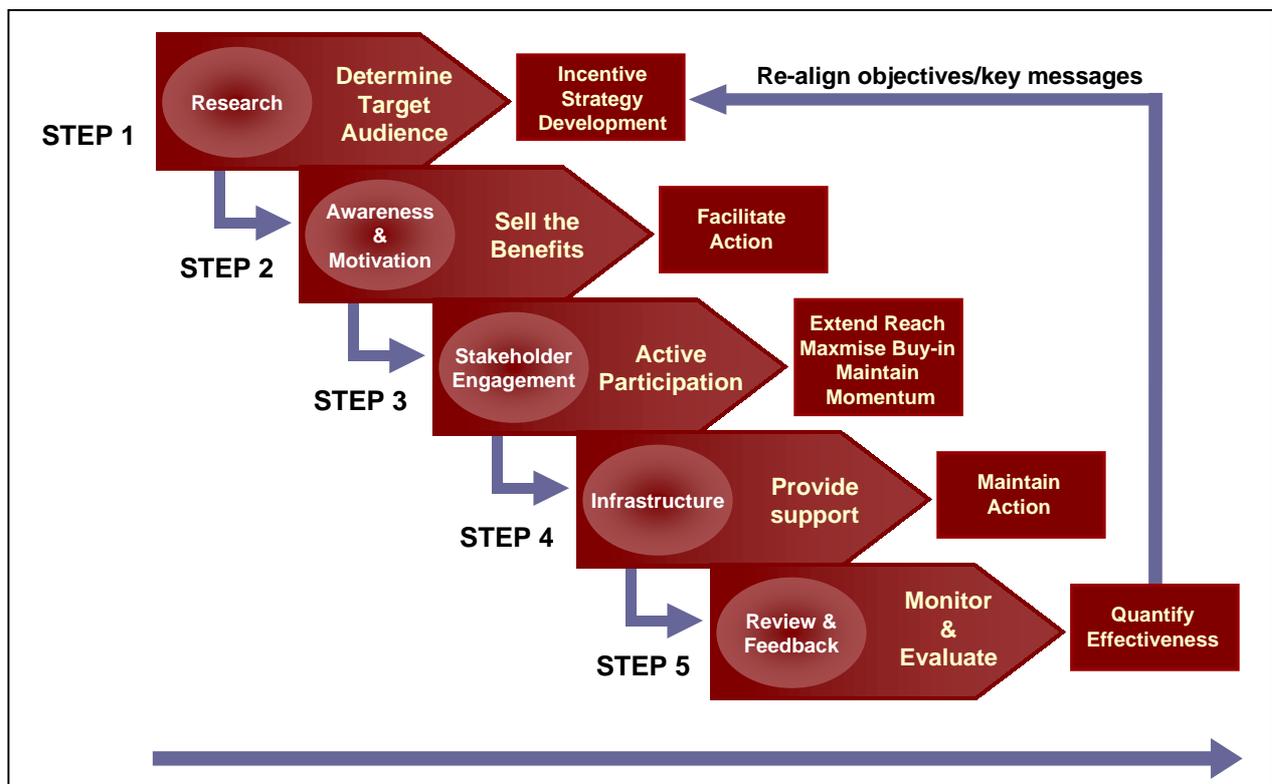
To maximise effectiveness of initiatives people need to be aware of **what** it is they are required to do, **why** they should be doing it and **how** they should be doing it. By way of illustration, this can be achieved through improved notices and stickers at recycling centres as to what can be recycled and providing details of what the benefits of people’s actions has achieved, e.g. sum of money raised for charity, reduction in disposal to landfill, etc.

5 Recommendations

Maintaining momentum and sustained action

Our recommendations have been drawn from the key outcomes and themes presented above. These have been developed into a strategic framework and action plan for use by local authorities to help them implement an optimum incentive scheme. The objective is to maintain momentum and sustained action through five key steps illustrated in Figure 5-1 below. The action plan for Incentive Scheme Delivery is given at Table 8.

Figure 5-1: Strategic Framework for Incentive Scheme Delivery



STEP 1

Research

The research highlighted that limited demographic profiling of target audiences is undertaken prior to key messages being developed, e.g. mothers, gardeners, towns and streets. In order to gain a more detailed understanding of the target audience marketing research is required at the outset.

Research of this nature can be obtained from the following activities:

- ACORN classification to determine socio-demographic profiling.
- Focus groups and questionnaires to determine more in-depth understanding of e.g. lifestyle, attitudes and opinions.

Target audiences then need to be selected and prioritised according to, for example:

- Common characteristics
- Greatest need
- Accessibility
- Relevance to resource
- Readiness for action
- Opportunities to achieve economies of scale
- Return on investment

The link between incentive schemes and lifestyle trends needs to be made. Therefore, consideration also needs to be given to lifestyle trends such as those illustrated in Table 6.

Target groups could comprise the following examples:

- Elderly (further divided into between 50-65 and over 65s)
- Children (further divided into primary and secondary)
- Businesses (according to size, sector etc)
- 18-35 year olds (further divided into gender)
- 35-50 year olds (further divided into gender)
- Persistent offenders
- Casual offenders
- Parents/mothers
- Gardeners
- DIY enthusiasts
- Trade union members

Table 6: Lifestyle Trends

Lifestyle Trends		Effect on Waste Stream
HEALTH	Increasing incomes, purchasing power and demand for healthier lifestyle	Creating demand for: <ul style="list-style-type: none"> • healthy snack foods • sports and energy drinks • drinkable yoghurts • portable water • drink alternatives People living longer creating potential for new markets.
CONVENIENCE	Busy lifestyles, increased leisure activities, saving time £1.9 billion spent on ready meals in the UK. Demand has risen by 44% between 1998 and 2002.	Increase in: <ul style="list-style-type: none"> • packaging • foil • cardboard • plastics • putrescibles
DEMOGRAPHY	The over 50s population is set to rise from 20 M in 2000 to 27 M in 2025. Over 50s possess 80% of UK wealth and 40% of spending worth £145 billion per year.	The only expanding consumer group with more disposable income than all other consumer groups combined. Increase in: <ul style="list-style-type: none"> • packaging Potential to: <ul style="list-style-type: none"> • appeal to values • lead by example • offset convenience

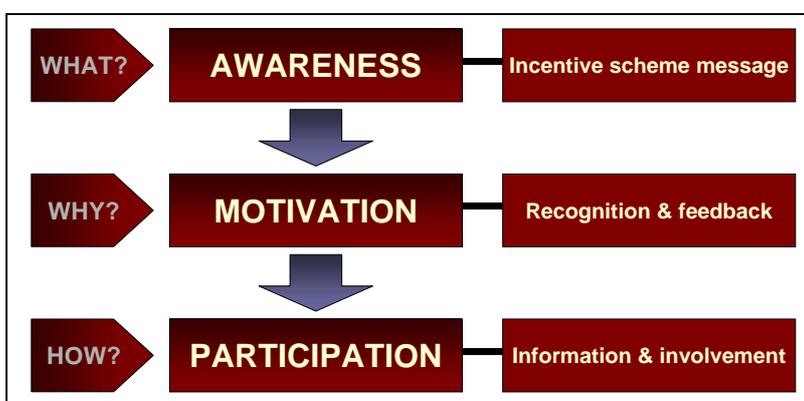
STEP 2

Awareness, Motivation and Participation

Most incentive schemes have targeted the general community, e.g. town, rural communities, streets. The research undertaken in Step 1 above will help to inform the development of an Incentive Scheme Strategy and the key messages required to motivate the target audience.

Incentive schemes need to raise awareness, motivate the target audience by selling the benefits (recognition and feedback on contribution made) and tell them how to actively participate. An outline of this approach is represented in the model in Figure 5-2.

Figure 5-2: Awareness, Motivation and Participation Model



Awareness - messages and themes are given as examples in Table 7.

Table 7: Example Messages for Raising Awareness

TARGET AUDIENCE	KEY MESSAGES	CONTEXT
Mothers	Getting to the bottom of the problem Nappy happy Make the change – for your baby’s future	Real Nappy schemes throughout the UK
Gardeners	Carry on composting Want to be a complete rotter?	Composting
Children	Waste busters Waste not want not	Education in schools
Community	Rubbish revolution Recycle day Where does it all go?	City National
	Waste away Make cash from trash Cash for trash Re-using paint for the community War on waste It’s not rubbish, recycle it! Worn them, recycle them No more junk mail!	Cash back schemes Re paint schemes County Clothing recycling

Motivation - to provide recognition and feedback to the target audience.

Both positive and negative feedback, should be fed back to the target audience recognising the contribution made. This feedback (via media and stakeholders) serves to further commitment to action. All feedback must be relevant and local. Examples include:

- How much is recycling worth?
- What happens to waste when it is recycled?
- What new materials or products are made from recycled materials?
- Every family uses ~500 glass bottles/jars per annum – only 25% are recycled
- If we contribute 25 fizzy drink bottles there would be enough material to make a fleece jacket
- Recycling your newspapers has helped pay for a new teacher or newly qualified nurse
- It costs you about £2000 to keep your baby in disposal nappies, but for around £200 you can have a full range of cloth nappies sufficient for three babies
- Edinburgh City Council spent £200,000 on disposing of nappies alone

Participation – providing information to simulate involvement.

Clear information needs to be provided on:

- What can be recycled
- How it can be recycled (clarify segregation)
- Where it can be recycled

Information to assist householders make choices about their purchasing decisions should be provided. Tools such as those listed below can be used and, where applicable, sited near the point of action to be most effective:

- Door drop leaflets
- Stickers on bins
- Improved labelling
- Recycling pack for newcomers
- Badges
- Fridge magnets

Promotion of incentive scheme activities can include:

- Media coverage (press articles, local radio, local TV)
- Slogans, key messages relevant to target audience groups
- Use of a mascot/spokesperson
- Publicity launch event
- Competitions, prize draws and quizzes
- Leaflets and posters
- Community group presentations/workshops

A public relations / advertising agency could be used to help with development of key messages and slogans.

STEP 3

Stakeholder Engagement

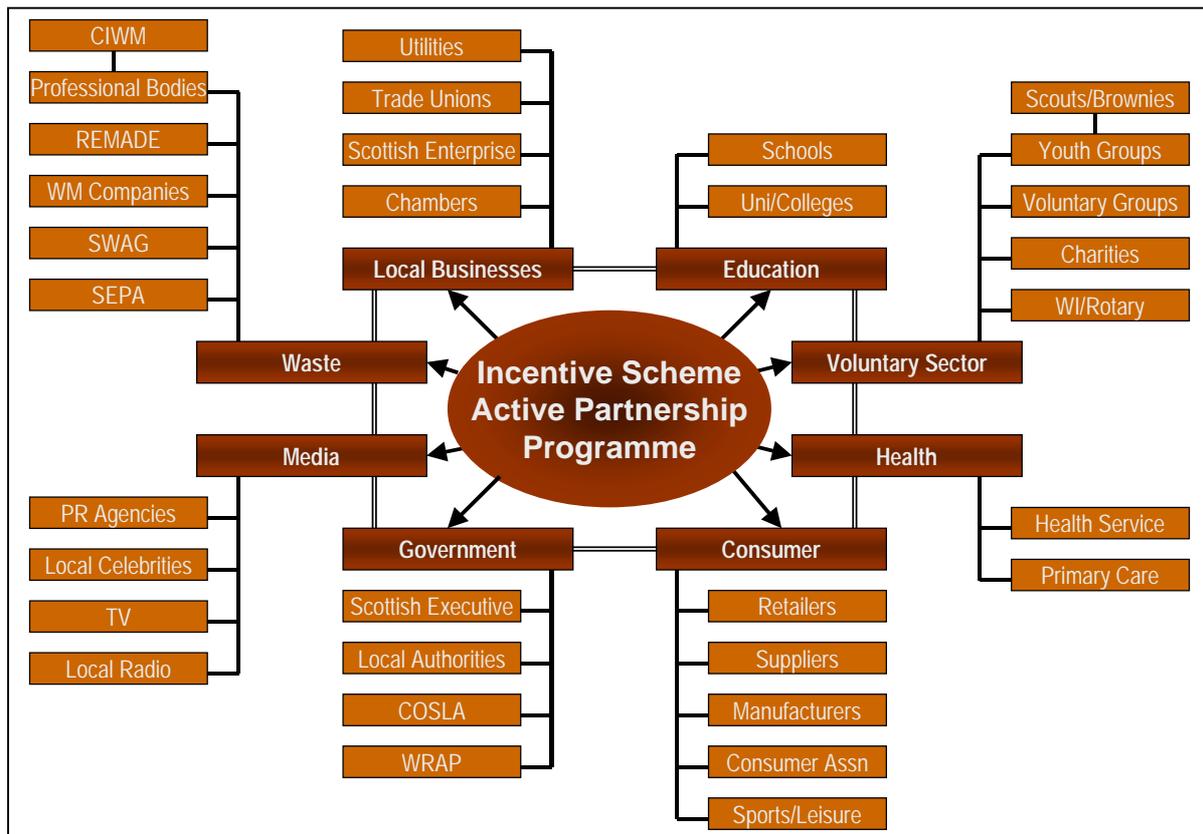
Stakeholders provide a valuable mechanism for helping to influence the target audience by acting as endorsers and advocates of the incentive scheme. A wide range of trustworthy and reputable stakeholders should be considered such as those that have an interaction with our daily lives, interests and hobbies, etc. For example: media, sports and leisure groups, trade and professional bodies, trade unions and commercial organisations. Incentive schemes will benefit from collective responsibility, heightened PR and media coverage such as local news and radio stations.

A stakeholder mapping exercise needs to be conducted such as that illustrated in Figure 5-3. Prioritisation of stakeholders then needs to be made according to incentive scheme objectives and level of participation required.

Stakeholder activities to inform why and how to get involved could include:

- Support/information pack
- Training workshops
- Press releases and articles in appropriate press, magazines and newsletters
- Stakeholder launch event
- Sponsorship opportunities such as support in kind, media coverage and use of venues

Figure 5-3: Stakeholder Mapping



STEP 4

Infrastructure

The purpose of a convenient facilities infrastructure and support service is to:

- ensure the target audience can carry out the intended action,
- provide appropriate support,
- maintain commitment and action.

A review of infrastructure relating to the proposed incentive scheme should be undertaken. The review should provide information on the appropriate facilities currently in place and those required e.g.:

- Kerbside collection scheme
- Improved recycling point
- Recycling centre

Tangible services to support the facilities could include:

- Community events
- Helpline
- Web site/pages
- Door knocking

STEP 5**Review and Feedback**

To ensure the incentive scheme capitalises on the perceived benefits, it is essential to review regularly (3, 6 and 12 month intervals dependent on scheme duration) and provide feedback.

Research will need to be conducted on the incentive scheme to determine achievements by undertaking the following:

- Desk research to review current status on objectives.
- Field research (selected focus groups) to gather attitudes to incentive scheme.

The research should be used to ensure the messages are targeted correctly with the aim of determining:

- Incentive scheme uptake and robustness
- Achievement of objectives and targets
- Change in knowledge/level of awareness
- Level of participation and contributions from stakeholders

Incentive scheme strategy objectives and key messages should be refined where necessary.

Table 8: Action plan for Incentive Scheme Delivery

	ACTION	COMPLETE
1	Undertake research to identify lifestyle attributes	
2	Develop strategy with measurable objectives	
3	Develop target audience profile and prioritise groups	
4	Develop key messages (use, for example, a PR/advertising agency)	
5	Develop awareness raising activities	
6	Produce stakeholder map	
7	Develop stakeholder support tools	
8	Ensure infrastructure in place to provide: (a) facilities required (b) tangible support services	
9	Undertake further research (desk and focus groups) to review progress against targets and change in knowledge	
10	Provide feedback to target audience and stakeholders	
11	Re-align objectives and key messages – feedback into strategy	
12	Disseminate results internally to maintain internal drive and enthusiasm and provide justification for continuation	

Recommended pilots and sources of funding

In conclusion, our recommendation would be to undertake two pilot incentive schemes using the framework and action plan above.

PILOT 1 : Existing kerbside collection:

Review all steps in framework with particular emphasis on:

- Step 4: Provide improved information and supporting services
- Step 5: Review and provide feedback on contribution made

PILOT 2 : New kerbside collection:

Where no facilities currently exist and infrastructure is required. As highlighted in the focus groups and research undertaken, the most desired incentive required is the provision of kerbside recycling and improved information. All steps in the framework 2 will need to be considered.

The Scottish Executive Strategic Waste Fund has earmarked some £232 million over the next three years to assist local authorities looking to fund such activities. Other sources of funding can be found on the SEPA National Waste Strategy website at <http://www.sepa.org.uk/nws/funding/index.htm>

Appendices

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Appendix 1	Research References and Personal Contacts
Appendix 2	Incentive Schemes and Campaigns Reviewed
Appendix 3	Assessment Framework
Appendix 4	Report on Market Testing

Appendix 1

Research References

1. Household Waste Behaviour in London, Resource Recovery Forum, Brook Lyndhurst Ltd, MORI, 2002
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Appendix 2

Incentives Scheme Research

1. Campaigns aimed at Changing Householder Behaviours Towards Waste
2. Incentive Schemes for Changing Householder Behaviours Towards Waste
3. European / International Incentive Schemes for Changing Householder Behaviours Towards Waste

Campaigns aimed at Changing Householder Behaviours Towards Waste

Organisation	Scheme Description	Aim & Objective	Publicity Tools Used	Focus/Target Audience	Duration	Outcomes
recycle-more.co.uk	Web-based campaign to encourage consumers to recycle their rubbish	To increase the amount of materials recycled in Britain. Website features an online recycling bank locator where consumers type in their postcode and they're shown a map of their nearest recycling banks and the sort of materials they accept.	Advertising billboards, taxis, website: www.recycle-more.co.uk	General public, particularly property dwellers	Short (launched ~Feb 2001) - Ongoing	Uses a website created in response to the new 'consumer info. obligations' under the packaging waste regulations which require certain businesses to inform their customers about recycling.
Run by Bristol Recycling Consortium in partnership with Bristol City Council	Education and Awareness Campaign "Rubbish Revolution"	Change people's attitudes and behaviour towards waste. Encouraging householders in Bristol to take action to reduce their production of waste and to increase reuse and recycling. Targets for recycling set	Launch, Advertising campaigns on buses etc, Logo established, Leaflets, Promotional events, House calls	Regional/ Targeted predominantly at the general public	3 years (1998-2001)	Monitored & developed campaign through monthly meetings, Target driven
Devon Authorities Recycling Partnership	"Don't let Devon go to Waste" campaign. Part of the national Rethink Rubbish	Increase awareness of waste issues, The Devon campaign links to the national "Rethink Rubbish" campaign	Six month initiative consisting of doorstepping, multi-media promotion/education and household waste analysis.		6 months	Kerbside recycling: A team of doorsteppers work in each local authority area in order to carry out a detailed survey of the use and understanding of recycling and to encourage more recycling. Communications Campaign, to raise awareness. Waste Analysis: A representative waste analysis carried out across Devon before and after the campaign. Household waste analysed to see whether or not people's recycling habits will be changed by the campaign.

Developed on behalf of the National Waste Awareness Initiative	Rethink Rubbish (national, 'umbrella' campaign)		High-profile partnership with leading retailers, a full media-relations programme, and a national roadshow tour			
Anglian Region Waste Awareness Campaign	ARWAC "Slim your bin"	Slim Your Bin campaigns aim to raise awareness and reduce waste. Started because the amounts of household waste are increasing the costs of its collection and disposal are spiralling, and the environmental impacts of other disposal options as landfill sites are rapidly used up.	Extensive press and radio coverage, TV documentary, roadshows, website: www.slimyourbin.org.uk		Medium / Ongoing	Multi-stakeholder support for regional campaign
Project Integra - Hampshire County Council	War on Waste	Increase public awareness of the waste problem, encourage people to take personal action in minimising waste and maximising recycling and finally, to increase public understanding of the need for unpopular waste facilities. To achieve: (1) General public awareness of waste issues, including understanding of the need for processing/disposal facilities; (2) Behavioural change of individuals by minimising waste and maximising recycling; (3) Government and industry actions to achieve source reductions of waste and maximise opportunities for recycling and recovery	Informing the media at local and national levels, development of links with Government and industry and continuation with community based initiatives	General public in the Hampshire region	Long (devised in Autumn 1996) Ongoing	Extremely successful campaign - nominated as a Beacon Council under the "A Way with Waste" theme in 2000

<p>LARAC (Local Authority Recycling Advisory Committee)</p>	<p>Buy Recycled</p>	<p>To increase the degree of recycling of waste and to generate demand for recycled products. Provides information to recycling officers to promote campaign and develop demand for recycled products through promotion</p>	<p>Conferences, events, posters, leaflets, recycling bank logos, adverts in trade press</p>	<p>National / General Public</p>	<p>Long (launched in 1998) Ongoing</p>	
<p>The Recycling Consortium</p>	<p>Waste Action Group</p>	<p>To promote sustainable waste management. To encourage waste reduction, reuse and recycling by working directly with communities, enabling local people to put into action their own solutions to their own waste problems.</p>	<p>Developing local initiatives such as community composting schemes, green directories, 3-D maps, information displays, and community art projects.</p>	<p>Local, Work with communities in inner city areas, suburban areas, housing estates, fringe suburbs and rural villages. www.recyclingconsortium.org.uk/cwa/cwa.htm</p>	<p>Long (Ongoing)</p>	<p>Since 1995, thirteen local waste action groups have been set up</p>
<p>Waste Watch</p>		<p>To work with community groups, local authorities and industry to educate, inform and raise awareness on waste reduction, reuse and recycling. To provide educational projects, information, consultancy, publications, training events, campaigning and advocacy for all sectors.</p>	<p>Leaflets, flyers, mailouts, website: www.wastewatch.org.uk</p>	<p>National / General public, industry and businesses, LAs</p>	<p>Long / Ongoing</p>	<p>Charity established in 1987</p>

<p>Bath & North East Somerset</p>	<p>Rethink Rubbish</p>	<p>To encourage all households in Bath & North East Somerset to reduce, reuse and recycle their rubbish. Raise awareness of waste issues and what we can all do to effectively deal with our waste. Encourage households to recycle at least a third of their rubbish and boost the recycling rate in B&NES to 30% by 2000/1 and 35% by 2002/3. Encourage households to compost a further third of their rubbish using a home compost bin or by taking garden waste to Household Waste and Recycling Centres. Encourage households to reduce the amount of rubbish they throw away.</p>	<p>Flyers, posters, website: www.bathnes.gov.uk/wasteservices/webRR.htm</p>	<p>Regional / A public awareness campaign that includes projects with schools, Parish Councils and community groups such as Keep Bath Tidy Group, Bath Organic Gardeners. Leaflets, posters, advertising on inside of buses, "Rethink Rubbish" exhibition touring libraries, advertisements in local press, magazines and Parish newsletters.</p>	<p>Medium Ongoing</p>	<p>Strategy has been developed for the next 2 years</p>
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Incentive Schemes for Changing Householder Behaviours Towards Waste

Organisation	Scheme Description	Aim & Objective	Publicity Tools Used	Focus/Target Audience	Duration	Outcomes	Problems
Environ / Leicester City Council	Can Buy Back	Encourage recycling	Cash Incentive - currently 35p per kilo (May 2002)	General Public/ Leicester Area	Ongoing	Cash reward & Increased Recycling of Al cans in region.	
Environ / Leicester City Council	Green Accounts	Encourage recycling	Cash Incentive - collect a range of recyclable products - receive credits for quantity recycled - Raise > £10 - receive a cheque	General Public/ Leicester Area	Ongoing	Cash reward & Increased Recycling of recyclable materials.	
Environ / Leicester City Council	Community Re>Paint scheme	Encourage recycling	Paint made available free of charge to community and charity groups	General Public/ Leicester Area	Ongoing	Reduce quantity of toxic compounds (contained in paint) being sent to landfill).	
Leeds	Join the Paper Chain Campaign	Joining the Paperchain was a campaign to promote a new kerbside collection service for paper in two semi-rural areas of Garforth and Wetherby, near Leeds	The campaign branding was bold and simple and carried its own subliminal recycling message, inviting people to take their place in the recycling loop. Campaign activity was tightly focused on the two areas concerned and featured: a leaflet sent to all 20,000 households in the two areas; colour posters distributed to strategic locations; newspaper advertisements announcing the start of the service; press photocalls with local school children; displays in local council offices; and liaison with local groups e.g. parish councils.	General Public/ Near Leeds Area	Two weeks	Drop in paper disposed was measured at the start of the campaign. Total tonnage of paper collected within the first 8 weeks was 197.61 tonnes with weekly tonnages varying between 23-30 tonnes.	
Leicester, Nottingham & Derbyshire	Turning the Tide	To inspire and inform people about environmental issues that directly affect them, and encourage them to take simple, practical actions to improve their quality of life and protect the environment.	Examples used include: A structured media campaign on television, radio and the local papers covering issues surrounding the campaign subject and promoting the Turning the Tide slogan. The production of leaflets and posters distributed through dedicated information points at prominent public places throughout each locality. Large scale promotional events often featuring the sale of campaign related products (such as energy efficient radiator panels or water butts) at significant discounts. A monitoring system which measures the impact of the campaign on awareness and behaviour.	General Public	Began in October 1996	In 1997 the success of the Leicester Turning the Tide encouraged the partners to expand the project regionally into Derby and Nottingham.	

W.Sussex CC	'Real Nappy' initiative.	Reduce the number of disposable nappies to municipal waste stream by offering a cash incentive to switch to real nappies.	Leaflets at libraries, health centres, in pre-natal packs, surgeries etc. 'Real Nappy' week in April each year.	Local/Regional. General Public	1999 ongoing	737 registrations for real nappies since scheme inception in 1999. Increase in demand for laundering service. Scheme ongoing	Positive response to campaign not matched by behaviour. Has required partnerships with hospitals, health professionals and shops
Rushmoor BC	Community Award scheme for recycling	To increase awareness of kerbside recycling. To increase public participation of the scheme. To investigate reward schemes as a way of encouraging behavioural change.	Scheme launched in LA magazine. Reward scheme itself was publicity. Press releases and posters.	Local. General Public			
Bracknell Forest BC	Community composting	Encourage home composting behaviour	Leaflets, brochures. Mobile exhibition trailers. Schools visits. Community composting	Local. General Public			£18.50 for first composter. £37 thereafter.
Aberdeenshire Council	Braemar Community Composting scheme	Feasibility, financial viability and public acceptance of a centralised community composting scheme for Braemar village and environs.	Stakeholder analysis. Questionnaire. Compost guidance leaflets produced by school children	Local. General Public	2002	Study ongoing;	Cost?, Odour, Transport, noise, Emissions
Southwark BC	Community composting scheme	Encourage householders to compost waste through an established small scale compost scheme.		Local. General Public	1998		

European / International Incentive Schemes for Changing Householder Behaviours Towards Waste

Country	Scheme Description	Aim & Objective	Publicity Tools Used	Focus/Target Audience	Duration	Outcomes	Problems	Cost Implications
America	America Recycles Day	To encourage Americans to pledge to buy more recycled products. To encourage every consumer to "make buying recycled products in the 21st Century every bit as natural as tossing a can into a recycling bin".	http://americarecyclesday.org/ By pledging to recycle and to purchase more recycled products you become eligible to win one of several national prizes.Recycling pledge at events nationwide	General Public	Yearly	Several thousand local recycling and Buy Recycled showcase events across the country media impressions, In 2001, nearly 1,000,000 pledges to recycle and buy recycled products were entered for the national awards. 125 government resolutions and proclamations were made in 14 states 46 States, plus the District of Columbia, Puerto Rico, and US Virgin Islands participated in America Recycles Day 135 events were listed on the official ARD events calendar Over 4,000 online pledges		
Belgium (Local Authorities)	Pay-per-bag scheme	Influence the amount of MSW set out, and on efforts made by householders to sort waste.Finance municipal waste management via 'household' or 'environmental' tax and payments for waste bags.		National. General Public	Study carried out in 1999	Decrease in the amount of residual waste offered by approx. 30kg per inhabitant; Separation effect accounted for 9kg (30%) on ave. and reduction in waste set out for collection was 21kg on ave. (70%). Scheme ongoing	Increase in bulky waste offered. Fly tipping?	Eu0.5 per grey waste bag.
Germany	Weight-Volume based system	Reduce the amount of residual waste from apartments using 'lock gate system'. Reduce WM costs. Reduce residual waste, increase dry recyclables. Setting up a polluter-pays fees system. Rationalisation of the waste collection.		Local. General Public	5 months	45% reduction in waste after installation of the Identify Press Weigh (IPW) centre.. Cost per month per household reduced from Eu220 to Eu171. Use of 'Lock gate' also reduced waste. Pilot scheme lasted 5 months.		Cost of IPW was approx. Eu19,400.. Concrete founding cost Eu2000
Italy	Tagged bag scheme.	Source separation for biowaste. Fixed and variable fee structure.		National/Regional. General Public	1998	Residual waste fell by approx. 18%. Source separation rose by 8%. Total production of MSW actually rose slightly. Scheme ongoing.	Slight rise in overall MSW arisings. Tags can get lost. Tax evasion accounted for 4.5% of total participants, though the true figure maybe double.	Variable and fixed costs not specified.

Italy	Pay-per-bag scheme.	Volumetric quantification of MSW. Identifying the producer. Introduction of PAYT. Implement such schemes in 20 other municipalities in the province of Bergamo.		Regional. General Public	1998	Scheme ongoing	Avoidance sometimes leads to deliveries outside Municipal boundaries (5-6% by weight)	
Luxembourg	Combined volume and weight-based scheme	Cost effective WM system. Generate fairness in waste fees and incentivising improved environmental behaviour in households. Polluter pays principle		Local. General Public	1995-96	35% reduction between 1994-1996 of total waste. 1 year pilot scheme.		Fees to customer depended on waste bin volume and waste type.
Sweden	Weight-based scheme.	To give economic incentives for households to recycle.. Weight based system and kerbside collection of 11 waste fractions.		Local. General Public	April/May 2000	75% of households presently have kerbside collection of recyclable fractions. Overall result of the last 2 years – total waste reduction of 30% and a reduction of residual waste of more than 70%. Scheme ongoing	Problems with the weighing system. Difficult to balance against budget. Recycling rates exceeded the fees needed to cover costs. More administration was needed. Burning of waste and fly-tipping.	Fees were compulsory or additional; dependent on frequency of collection chosen, weight of waste (residual and compostable), collection of recyclables and garden waste.
Belgium	Residual waste levy	Tax on municipalities if total amount of household waste collected exceeds the legal amount. Ensure that every inhabitant is conscious of waste prevention.		Local. General public	January 1999	Difficult to see overall practical results of tax measures. 34% recycling and composting in 2000. Scheme ongoing	Increased likelihood of fly-tipping.	Tax dependent on weight produced.

Greece	Schemes using aluminium can return-vending machines.	To divert a portion of the aluminium from the municipal waste stream. Recover value of cans Promote environmental awareness.	Publicity in supermarkets. Involvement of local business for prize giving.	National/Local. General Public	2 Years	Two schemes; One with 50 vending machines, and one with 13 vending machines. First scheme failed through lack of interest and motivation. Second machine addressed problems and was more successful. Pilot scheme over 2 years.	Scheme 1; Lack of motivation and interest. Not viable economically. Homeless people showed more interest, but supermarkets felt this was bad for their image. Machines became dirty and neglected.	Refund of approx. Eu0.012-0.015 per aluminium can. Vending machines were operated by private firm (ESPAS HELLAS) each cost Eu8000. Scheme 1 operated by supermarket chain Marinopoulos. Scheme 2 operated by a businessman with co-operation from supermarket chain AB Vasilopolous.
Sweden	Promotion of home composting.	Reduce the amount of waste at source, and encourage recycling of plant nutrients.	Information through brochures	Regional. General Public	1992 onwards	20% of all owners of detached houses and 14% of owners of summerhouses or leisure homes have applied from fee reduction for composting. Scheme ongoing	Application for fee reduction without possession of a compost bin. Compostable waste being put in with residual waste 25-50% of potential compostable waste went this way. Mismanagement of composting bins; complaints about odours, rats and birds.	Approved compost bins cost 1000SEK to buy.

Appendix 3

Assessment Framework

ASSESSMENT FRAMEWORK	CORRESPONDING QUESTIONS/PROMPTS	RESPONSES
Scope of the scheme	<ul style="list-style-type: none"> ▪ What was the scheme coverage (e.g. national, regional, local)? ▪ Who was responsible for organising/managing the scheme? ▪ What did the scheme cost? ▪ How was it funded? ▪ How many people were involved in running the scheme? ▪ When did the scheme start/finish? ▪ Was the scheme for the common good or was it of direct benefit to an organisation? ▪ Did the scheme use a ‘stick’ or ‘carrot’ approach? 	
National factors relevant to the scheme (as appropriate)	<ul style="list-style-type: none"> ▪ What were the key influencing factors behind the scheme (e.g. political, economic, environmental, social (health/safety), technological)? ▪ What were the reasons for having a national scheme? ▪ Was there a national infrastructure in place/required to support the scheme (e.g. call centre / helpline)? 	
Local factors relevant to the scheme (as appropriate)	<ul style="list-style-type: none"> ▪ What were the key influencing factors behind the scheme (e.g. political, economic, environmental, social (health/safety), technological)? ▪ What were the reasons for having a local scheme? ▪ Was there a local infrastructure in place/required to support the scheme (e.g. for waste scheme - recycling / composting scheme)? 	

ASSESSMENT FRAMEWORK	CORRESPONDING QUESTIONS/PROMPTS	RESPONSES
SCHEME BACKGROUND		
Stakeholders and Partners	<ul style="list-style-type: none"> ▪ Who were the key stakeholders and partners? ▪ How often did you communicate with them? ▪ How did you communicate with them? ▪ How did they contribute to the scheme? ▪ How effective were they? 	
Target audience	<ul style="list-style-type: none"> ▪ Who was the scheme aimed at? ▪ What were the reasons behind choosing this target audience? ▪ How did you choose your target audience (i.e. segmenting and targeting)? ▪ At what level of awareness were the target audience (e.g. aware, interested, desire to take action, action)? 	
Limiting factors	<ul style="list-style-type: none"> ▪ What constraints were there in setting up the scheme? ▪ Were there any resource limitations? ▪ Was it difficult to get stakeholders interested? 	
Literature	<ul style="list-style-type: none"> ▪ Was any literature produced for the scheme, if so in what form? (Obtain copies). ▪ Was a media pack produced? 	

ASSESSMENT FRAMEWORK	CORRESPONDING QUESTIONS/PROMPTS	RESPONSES
SCHEME OBJECTIVES		
Aims and objectives	<ul style="list-style-type: none"> ▪ What were the scheme aims and objectives? ▪ Why were these chosen? ▪ Were the objectives SMART (specific, measurable, achievable, relevant and timebound)? 	
SCHEME STRATEGY		
Communication strategy	<ul style="list-style-type: none"> ▪ What communication models (if any) were used? ▪ What combination of ‘pull’, ‘push’ and ‘profile’ strategies were used? ▪ Within ‘profile’ strategies, which stakeholders were involved? 	
SCHEME TACTICS		
Scheme management	<ul style="list-style-type: none"> ▪ How was the scheme managed? 	
Publicity tools	<ul style="list-style-type: none"> ▪ What types of media were used? (E.g. TV, radio, national/ local press, posters, flyers, direct mail etc. Indirect – retailers (product advertising), web etc). ▪ How effective were they? ▪ What worked particularly well? ▪ What didn’t? ▪ Were any other tactics used? (E.g. branding, opinion leaders and formers etc.) 	

ASSESSMENT FRAMEWORK	CORRESPONDING QUESTIONS/PROMPTS	RESPONSES
SCHEME ACTION PLAN		
Methods used	<ul style="list-style-type: none"> ▪ Was there an action plan? ▪ Was this specified in any form? ▪ Was it communicated, if so to whom? ▪ Was the action plan followed? ▪ Were any corrective measures taken? 	
CONTROL MEASURES EMPLOYED		
Targets, evaluation and timing	<ul style="list-style-type: none"> ▪ How was the scheme controlled? ▪ What control targets were used? ▪ What evaluation methodologies were deployed? ▪ What timing controls were imposed? 	
SCHEME EVALUATION		
Target audience	<ul style="list-style-type: none"> ▪ Did the scheme reach its intended audience? ▪ If so, how was this monitored? 	
Aims and objectives	<ul style="list-style-type: none"> ▪ Did the scheme achieve all its aims and objectives? ▪ How were the aims and objectives met? ▪ Were they measured (i.e. SMART)? 	
Evidence of action	<ul style="list-style-type: none"> ▪ Is there any evidence of increase in awareness or movement to take the intended action? ▪ Was any follow up research undertaken? 	
Success criteria	<ul style="list-style-type: none"> ▪ What worked particularly well? ▪ What didn't work particularly well? ▪ If you had the opportunity to do it all over again, what would you do differently? ▪ Were there any unanticipated barriers? 	
	<ul style="list-style-type: none"> ▪ Any further comments? 	

Appendix 4

STRUCTURE OF FOCUS GROUPS AND PARTICIPANTS

Four Focus Discussion Groups were conducted among members of the general public (householders) living within the selected postcode areas KA3 Kilmarnock, EH6 Leith, IV1 Inverness and EH12 Edinburgh. These areas represent a number of key occupational characteristics including professional, managerial, trade and manufacturing backgrounds and retired individuals. The areas are also diverse in their social and financial mix covering affluent, high unemployment and cosmopolitan areas. 520 potential participants in the research were identified during first stage of the study but it was recognised that not all would be available or willing to participate.

Recruitment

Invitations to all 520 potential participants in the research area were sent by letter with an explanation of the project, the purpose of the proposed research exercise with a response mechanism. Research using a commercial database provided named individuals in each of the postcode areas.

In order to achieve a sufficient level of response, Enviromentor Ltd telephoned potential participants who responded positively to the invitation letter or were part of the commercial database to encourage attendance. The number of telephone calls made comprised of:

- KA3 - 92 calls of which 25 responses were negative and 2 deceased;
- EH6 - 64 calls of which 12 responses were negative, 1 duplicate and 1 deceased;
- IV1 - 80 calls of which 26 responses were negative and 2 deceased and;
- EH12 - no calls were required and 2 individuals responded to say they were unable to attend.

A letter of confirmation was sent out at least two weeks prior to the meeting and a subsequent telephone call was also made to attendees immediately prior to the date of the meeting to confirm attendance and availability of the target interviewees. This time-consuming task is not unusual when working with focus groups and, for many individuals, participating in an environmental research exercise, however important, is not a high priority.

Response

The quickest and most enthusiastic response was from the EH12 postcode area, where a reserve waiting list was easily established. These individuals from a cosmopolitan high income area are motivated and keen to implement environmental policies and practices which they not only see as a social activity but as a real means of improving environmental practices and sustainable activities. The poorest response was from the KA3 postcode where only 9 respondents replied and on the evening of the focus group, which was very cold with icy conditions, 4 individuals attended. Almost full numbers of attendance were obtained at all the remaining Focus Group sessions.

The percentage responses in the table below include those who expressed a willingness to participate even if they were unable to attend a Focus Group and would be willing to be interviewed by some other method separately.

Focus Group	Number of individuals contacted	Number Recruited	Percentage of Recruitment
1	130	9	7%
2	130	13	10%
3	130	12	9%
4	130	14	11%
Total	520	48	9.25%

In overall terms, a 9.25% response is satisfactory for this kind of exercise and would prove to be more than adequate at supplying the study with meaningful information.

The Focus Groups

The schedule of Focus Groups and the numbers confirmed and those that actually attended is shown in the table below.

Focus Group	Date	Confirmed	Attended
Focus Group 1 Kilmarnock, Ayrshire KA3	7 January 2003	9	4
Focus Group 2 Edinburgh, Leith EH6	9 January 2003	12	10
Focus Group 3 Inverness IV1	15 January 2003	11	8
Focus Group 4 Edinburgh, Clermiston EH12	16 January 2003	11	10

It can be seen that 32 individuals participated in the Focus Groups.

In terms of time, participants spent a total of almost 50 hours and engaged in significant and meaningful discussion of the topics covered. Again, this is very significant in market research terms and demonstrates the level of interest in and commitment to environmental issues by those who participated. Each session was recorded throughout, and at the end of the discussion, interviewees expressed a

keen interest in a continuing involvement in the study and a request to learn more of the initiative.

Those who attended the Focus Groups participated fully and genuinely allowing a frank and free discussion to take place. Dr Marion Croy and Mr Gregor Pennie moderated all the Focus Groups. Peter Brown, the Project Officer, attended the final group EH12 and acted as an observer.

The aims of each Group were easily achieved with such lively and interested participants even when numbers were small, and consensus was reached on most of the issues raised. In addition to the recorded tape transcriptions, key points were also written on to a flip chart. These form the basis of the section titled Outputs describing the key results.

Topics for Discussion

The subject matter discussed at the Focus Groups was outlined in the AEA Technology proposal 'Incentives for Householders to Change Their Waste Practices' dated September 2002 to Scottish Executive, and agreed at Steering Group meeting on the 16th December. This "Topic List" is shown below and was used to provide structure to the Focus Group proceedings.

1. Introduction (10 min)

Introduce moderators

Introduce background to the study

Aims:

How much waste? Can we reduce it? Can we recycle it? Do we care?

We all seem to do it, but could we do more?

What motivates us to change our behaviour – start recycling, recycle more, reduce waste?

What incentives would make a difference to us?

How do we promote the incentives and successes? When?

Ground rules:

Permission to record discussion

One person talks at once

No right or wrong answers

Healthy debate not argument

Everybody should talk

2. Waste and Recycling - Personal Motivation and Behaviour (20 mins)

How much rubbish does your house produce each week? How do you compare to other householders in your flats/street/area? Are you concerned? Why/why not?

What happens to your rubbish after it is taken away from your house?

How much is recycled, buried (landfilled), EfW? Does this matter? Why/why not?

How much, if at all do you recycle?

CARD: Jot down one or two things that you never/sometimes/always recycle

How do you recycle?

PROMPT: kerbside collection, recycling point (bring site/bottle bank), recycling centre (civic amenity site), compost

Who is responsible for taking the bins out?

Is anyone responsible for recycling?

Do you ever recycle at work? Could you recycle more at work?

PROBE for link to home.

Why do you recycle?

What do you like about recycling?

PROBE: environmental concerns, children, economic reasons, moral, social, community spirit, efficiency, tidy home

What do you dislike?

PROBE: convenience, knowledge, untidy sites, storage

3. Waste and Recycling - Incentives to Change Behaviour (30 min)

What makes us behave in the way we do?

PROBE: society, laws, peers, education, parents

How do we give recognition for good behaviour? Is it important? Why/why not?

PROBE: Rewards

How do we give recognition for bad behaviour? Is it important? Why/why not?

PROBE: Punishments

How do we change poor behaviour/practice into good behaviour/practice?

What national incentives have successfully encouraged us to change our behaviour, e.g. stop doing something, try something new? Why successful? Why have we changed?

PROMPT: Clunk-Click (seatbelts), Anti-smoking, Drink-Drive, Say No to Drugs, Switch-Off- Something

PROBE: awareness, health, moral, economic, peers

What retail incentives have successfully encouraged us to change our behaviour, e.g. buy more? Why?

PROMPT: Loyalty cards, charitable donations, petrol tokens, Buy-one-get-one-free, cash back, money off vouchers

What incentives would encourage us to change our recycling behaviour and start recycling or recycle more waste?

Direct Financial

Reverse vending (take back waste and sell to retailer)

Lottery/prize draw

Cash back for recycling volume/bin/bag

Community credit (payback to community)

Ring fence village/street

Funding teachers/nurseries

Schools environmental projects

Donate to charity (e.g. £1/tonne)

Trees/benches

Taxation/Charging

Pay flat charge for all waste collected

Pay charge for waste collected over threshold volume (e.g. no charge for 3 bags/household)

Pay charge per volume collected (e.g. charge per bag)

Others

Sponsored giveaways

Stickers

Badges

Tickets to sporting/cultural events

Which of these incentives would change recycling in your household?

CARD: Jot down the incentives that would definitely make you start to recycle or recycle more

CARD: Jot down any incentives that would definitely not change recycling in your house

4. Reducing, Reusing and Recycling Waste - Barriers to Change (15 min)

Do you realistically think you could do more to recycle waste?

Is anything preventing you doing this?

PROBE: Time, not clear about what can be recycled, poor recycling services, storage space, keeping materials is untidy/dirty, too much trouble

Do you think there is anything you could do to reduce the waste your household produces?

PROMPT: avoid disposable products (plates, forks, cups), buy bags for life from supermarkets, give items to charities (e.g. clothes, books), don't take extra bags in supermarkets, take bottles back to shops, buy washable nappies

Would you be willing to put this into practice?

Do you think there is anything you could do to reuse the waste your household produces?

PROMPT: repair items, use envelopes & jiffy bags more than once, refill containers, use carrier bags more than once, use glass and plastic packaging containers for storage

Would you be willing to put this into practice?

5. Responsibility for Promoting Incentives (10 min)

Who is responsible for waste? Which organisations?

Who is best placed to promote incentives for recycling?

PROBE: stakeholders, government, local council, regulators, environmental groups, schools, supermarkets

What is the best way to promote successes to householders?

6. Conclusion (5min)

What one incentive would encourage you to recycle more household waste?

What one incentive would encourage you to reduce the total amount of rubbish from your home?

Any reactions/messages to take back?

Summary of discussion to be posted

Thanks and end discussion

OUTPUTS

Waste And Recycling – Personal Motivation And Behaviour

How Much Waste?

All householders used bin bags for domestic waste collection. Even though some councils provided wheelie bins (e.g. East Ayrshire), bin bags are still used to keep the bins clean. The amount of bags produced on a weekly basis varied from 1 to 7, with most households producing between 2 and 4. Only one householder used a communal bin in a block of flats. Householders that produced the greatest amount of waste were generally aware that they produced more than their neighbours. Householders were also aware that most domestic waste in Scotland was disposed of to landfill (buried) and there was concern that landfill was harmful to the environment.

How Much Recycling?

Householders were keen to recycle and currently recycle many different types of waste, including cans, tins, plastic bags, plastic bottles, clothes, paper, newspapers, cardboard, batteries and food waste (compost). Most householders recycled 2-3 different materials, although a few individuals recycled all that they could and recycling was conducted as a regular activity, rather than a sporadic event. Absence of specific facilities (e.g. containers for plastic, paper), inconvenient location of recycling points at supermarkets, lack of knowledge about what can be recycled and dependence on owning a car to carry waste to recycling points or recycling centres (civic amenity sites) were barriers to doing more. Only three householders (9%) did not recycle any waste at all.

How to Recycle

Recycling points at supermarkets were most frequently used for recycling and recycling centres were also used, if available locally. Some householders composted organic waste in their gardens or use green cones. There were no kerbside collection schemes in operation for householders participating in the Focus Groups. Waste was usually seen as the shared responsibility of the adult

members of the household or as the responsibility of the adult male. Recycling was often the responsibility of the adult female, although this was also shared.

Why Recycle?

Householders unanimously felt good about recycling. There were a small number of key drivers for recycling and these included:

- Environment,
- Being green,
- Social conscience,
- Dislike of waste,
- Upbringing,
- Guilt,
- Doing-your-bit.

Barriers to recycling were much more numerous and these included:

- Physical ability (age),
- Difficulty (time, convenience),
- Fear of fraudulent use of waste material (e.g. junk mail),
- Untidiness of facilities,
- Overfull sites,
- Failure of facility to meet recycling demand,
- Frustration,
- Low priority,
- Un-cleanliness of recycling facilities,
- Inconvenience,
- Lack of knowledge about what can be recycled,
- Finding out where different materials can be recycled,
- Poor siting of recycling facilities at supermarkets,
- Withdrawal of recycling schemes (e.g. newspapers),
- Distrust that materials will be landfilled rather than recycled,
- Perception that recycling is uneconomically viable.

Waste And Recycling – Incentives To Change Behaviour

What Drives Behaviour?

Factors identified to influence behaviour were diverse and included:

- Nature and nurture,
- Class and culture,
- Peer pressure,
- Society,
- Consideration for other people,
- Concern for the environment,
- Childhood and parents' behaviour.

The law, government or regulatory organisations were not identified as influential and were not discussed by any of the Focus Groups. Response on how to change behaviour, from poor practice to good practice, was mixed. Use of “carrots and sticks” (rewards and punishments) was thought to be unimportant as an incentive

to change behaviour and a clear preference for reward over punishment was apparent at all groups. Incentives to change behaviour were viewed to be short-term, but for long-term changes access to knowledge, better education and culture change were highlighted.

National Campaigns and Incentives

The Focus Groups found difficulty in identifying successful national campaigns, which changed their behaviour, without using prompts. The exception was the Drink-Driving campaign, which was raised at one of the four Focus Groups. Unsuccessful campaigns were more easily identified, such as anti-litter and anti-smoking. Similarly, participants were generally unable to identify retail incentives, such as loyalty cards, money-off vouchers and buy-one-get-one-free schemes without prompting. Most did not use these schemes, a few individuals expressed a dislike for them and of the schemes used, petrol tokens were the most frequently used.

Incentives to Encourage Recycling

The participants had strong opinions about what incentives would change their recycling effort. Each of the four Focus Groups independently stated that the greatest incentive would be to have a kerbside collection scheme and all participants unanimously agreed that if provided, they would all use the facility to recycle waste. Some individuals felt that no other incentive would be necessary. Similarly, better access to recycling points (i.e. nearer to householder, no transport required, easier to recycle) would also increase recycling.

Financial Incentives

There were mixed views on how effective financial incentives were to encourage recycling, both within Focus Groups and across the groups. One reason for this could be explained by the personal experiences of the participants. For example, some of the participants had lived in Germany, Canada and the USA and these individuals tended to do more recycling than the other members of their Focus Groups. They also had strong opinions on how financial incentives could be introduced into Scotland. Direct financial incentives, such as deposit schemes and reverse vending were generally supported in all focus groups. However, taxation or charging schemes were not.

Variable charging schemes were viewed as unfair for larger families and for poorer householders. Concerns were also expressed that unpaid waste charges, through variable charging or tagging systems, would lead to unauthorised dumping or litter and the tax payer would pay additional costs to clean up for non-payers.

Householders were unaware about how much waste disposal cost them as part of their community charge. Estimates ranged from £1/week to £10/week, although most were not able to give a figure. All participants were surprised at how little the cost was (approximately 50p/week) and most were prepared to pay more. A rebate of Council Tax for recycling was not considered an incentive, in view of the small sums involved.

Direct financial incentives, which were suggested included:

- Deposit schemes for bottles (5p-25p),
- 10% deposit on plastic bottles and aluminium cans at the point of sale (scheme operates in USA),
- Reverse vending at supermarkets for cans, plastic, paper, glass, with choice of cash-back, money-off grocery bill, or donation to charity (scheme operates in USA)

Community Incentives

These types of incentives were overwhelmingly viewed to be more desirable and effective than financial incentives, but reassurance that money will be donated as promised is required. Ideas suggested by the Focus Groups included:

- Charity donation to local schools or hospitals from savings,
- Donation to impoverished children,
- Charity donation to Oxfam for cans,
- Donation to children in the community,
- Donation to local parks from recycling revenue,
- Street collection donations to charity.

Reducing, Reusing And Recycling Waste – Barriers To Change

Barriers to Reduce Waste

It was generally felt that the best way to reduce householders' waste was at source and many householders make an effort to reduce waste at the point of sale. For example, participants used traditional shopping bags or bags-for-life, refused extra or excessive bags and some even left unwanted packaging at supermarket check-outs.

Consumer choice was discussed as a mechanism to reduce waste at source. Choosing loose fruit and vegetables, rather than pre-packed goods was common across all groups. In addition, choosing long-life products, such as low energy light bulbs and reusable nappies were raised as examples. Three of the participants had children, which used or had recently used reusable nappies, purchased on environmental grounds. All had stopped using the nappies, for various reasons, such as incompatibility with nursery requirements. Incentives, such as cash or voucher schemes, would not have influenced whether to continue using reusable nappies in all these cases.

It was felt that supermarkets, retailers and manufacturers needed to take more responsibility for reducing the amount of packaging used, which eventually ends up in the household. Specific ideas were raised to do this. These included:

- Set up system to leave or take packaging back to supermarket checkout,
- Green dot scheme (scheme operates in Germany),
- Legislate to enforce retailers to take back packaging,
- Tax plastic bags in the supermarket (scheme operates in Ireland),
- Reduce packaging for organic products (often have more packaging than non-organic products).

Reducing waste in the home was more difficult for the participants to identify. Examples, such as composting organic waste and the use of a waste disposal unit

were used by only a minority of the Focus Group participants. Many householders felt that they would be willing to compost organic waste, if a free compost bin were provided.

Barriers to Reuse Waste

Reuse of waste was often confused with recycling, but once explained, it was clear that many of the householders already reused waste within their homes. Examples included the reuse of plastic carrier bags to contain domestic and pet waste, the reuse of jiffy bags, jars and screws.

Barriers to Recycling Waste

The key barriers to recycling were identified as poor general awareness and lack of knowledge about the benefits of recycling. More widely available information about what happens to waste when it has been recycled, how much it is worth and what new materials or products can be made from recycled waste is required. It was felt that improved education and awareness about the value of recycling to the householder, the community, government and the environment would in itself be an incentive and motivate people to do more and reinforce to those who do recycle, that they are doing something beneficial. For example, if landfill tax is saved through recycling effort, what would this be worth financially, to the government and the local community? How much could be used to support environmental projects in a specific area?

In addition, lack of confidence that wastes are being recycled and not dumped was a barrier for some participants. For others, not knowing what can be recycled or how it can be recycled was also identified as a barrier. It was suggested that simple information, perhaps in the form of a circular information dial could be provided to every household. Each segment could represent a waste recycling solution, and this could be produced for each local area.

Responsibility For Promoting Incentives

Who is Responsible for Waste?

A large number of organisations and individuals were seen as responsible for waste, and these included manufacturers, local authority, government, retailers and consumers (householders).

There was concern that consumers were unable to exercise sufficient choice over the amount of packaging supplied with products, particularly where supermarkets are concerned. There was a general consensus that manufacturers, retailers and the consumer should all have a greater part to play in reducing waste at source, particularly with over-packaging products and excessive use of carrier bags, rather than dealing with waste in the household. Engaging the supermarkets and retailers was thought to be key to reducing waste overall and this should be the responsibility of the government.

Who is Responsible for Promoting Incentives?

The government and local council were identified as the key organisations for promoting incentives to reduce, reuse and recycle waste in all Focus Groups. It was suggested that government should be responsible for policy and the local

authority for carrying out the policy. Others also mentioned included the Minister for the Environment, supermarkets, manufacturers, schools and SEPA.

How to Promote Successes

There was a consensus across all Focus Groups that the key mechanisms for promotion were television, radio and newspapers. In some areas, community newsletters would also be appropriate.

Conclusion – Reaction

The direct quotes below are spontaneous reactions by the Focus Group participants. These are all the comments received, some of which were provided by more than one participant.

Key Incentives to Reduce Household Waste

- Ease
- Knowledge about the benefits
- Consumer choice
- Key Incentives to Recycle More Household Waste
- Ease
- Education
- Kerbside collection scheme
- Understanding the value

Take-home Message to Project Sponsors

- Clear up the mess
- Adults and children need better education about how and what to do as individuals
- There is a will to do more
- Choose a few initiatives, rather than one
- Raise awareness
- Practice what you preach
- Don't reinvent the wheel – learn the lessons from others
- Provide facilities to recycle vegetable oil
- Provide appropriate recycling points or centres for plastic recycling
- Cut down producers – cut down manufacturers
- Education – Education – Education
- More litter bins – more recycling bins
- Put a deposit on the basics – or the Scottish Executive is not going to meet its targets
- This needs big messages – be imaginative and bold – we have to take it seriously
- I want to leave my packaging behind in the supermarket
- Cut down packaging on organic produce – it has to be wrapped to make sure it's organic
- All schools should have their own recycling bins.