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Report for Zero Waste Scotland

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Introduction

The Scottish National Litter Strategy aims to reduce litter and flytipping. The strategy's focus on prevention, "aims to...reduce the need for clean up or enforcement". 'Community Action' is one intervention identified within it. This recognises the value of empowered communities in raising awareness about litter and flytipping, and through litter prevention improving local environmental quality.

Clean-ups are the most widespread of current efforts in the community sphere and they have many positive outcomes. However with regard to prevention there are various considerations that could help maximise their litter prevention benefits. Other types of community interventions are also capable of effecting litter prevention. Therefore Zero Waste Scotland commissioned a study to research ways in which community level activities can best be developed and supported to bring about litter prevention. This is so that the Scottish Government can reflect upon how to support the empowerment of communities to deliver change.

Desk based research, expert interviews, and workshops were used to investigate case studies and stakeholder views regarding community actions. The approaches researched which were believed, based on practitioner experience, to have the most potential to prevent littering were grouped into five 'options' as a way of presenting the findings. The options were designed to best reflect the range of possible variants within each approach. They are not discrete entities but can be combined or used in succession.

The options, in no particular order, are:

- Option 1: Litter Pick PLUS clean-ups designed to maximise the litter prevention impacts;
- Option 2: Community Led Campaigns;
- Option 3: Monitoring and Citizen Science;
- Option 4: Incentives used to motivate behaviour change; and
- Option 5: Wider Community Approaches, including;
 - Option 5a: Community Green Space and Street Improvements re-purposing sites for community use as green spaces; and
 - Option 5b: Wider Community Building to develop a sense of civic pride leading to litter prevention effects.

Quantitative and even qualitative evidence regarding litter prevention effects is challenging to establish and is, as a result, hard to come by. Therefore we have also explored other factors that have a potential bearing on long-term litter prevention.

For each option a summary was made of considerations for maximising the success and impact of future projects. These considerations represent the research findings that can be applied to the generalised approach. It is recommended that further practitioner consultation is undertaken to learn from previous experience when developing the options and implementing specific projects.

Lastly, we outline the wider benefits that can be achieved by each option. It is thought that many of these wider benefits will themselves engender litter prevention by addressing underlying social and environmental issues that are thought to be factors in littering behaviour.

Option 1: Litter Pick PLUS

Litter Pick PLUS maximises the potential of clean-ups through broad engagement with the local community, enhanced communication and long-term community participation. The aim is to influence behaviour change through boosting local community spirit, empowering local people to take pride in their area and play a part in preventing and reducing littering through clean-ups and flytipping removal.

Evidence of litter prevention benefits:

- Many community groups that organise litter picks and flytipping removal report reductions in local litter arisings;
- However, the extent and duration of litter prevention has not been measured and reported within the case studies identified;
- Case studies do suggest that litter prevention is greatest where community led activity continues over an extended period; and
- Litter picks tend to involve self-selecting volunteers so encouraging a wider range and number of participants can arguably increase the potential of engaging hard to reach groups, and enhance the ability to influence behaviour change towards litter prevention.

Key Advantages	Key Disadvantages
An extensive base of litter picking groups exists that could be encouraged to adopt the enhanced characteristics of Litter Pick PLUS.	Risk of not engaging a broad range of people and not reaching 'litterers' through the initiative.
An established range of resources is available to support community groups to arrange an event.	Risk of not sustaining long-term momentum in groups to generate behaviour change.

The key considerations identified for maximising the success and impact of future projects are:

- **Sustaining local momentum**: ongoing support for local community groups could reduce project vulnerability from reliance upon a few key volunteers;
- Best practice: sharing successful methods of engaging hard to reach groups and monitoring litter prevention levels will help develop models of best practice;
- **Collaborative working**: greater cross-sector working (e.g. engaging with healthcare practitioners) could help community groups increase participant numbers and diversity; and
- Enhanced communication: promoting upcoming local events and recent successes will increase awareness of activities, and help to recruit new participants.

Litter Pick PLUS could also generate a range of wider benefits including improvements in habitats and local wildlife, more cohesive communities, reduced social isolation, less local authorities resources devoted to clean-ups, and potentially the transformation of formally disused or underused local spaces.

Option 2: Community Campaigns

Community campaigns are intended to raise community awareness of local litter and encourage litter prevention behaviour, and can be led by the community or an external organisation. Community led campaigns can be locally, regionally or nationally inspired and are intended to empower local residents to highlight the problem of littering via posters, social media, radio, etc. Externally led campaigns seek to influence behaviour by working with local residents and the wider community on litter prevention projects at specific sites, they can often include a transformational element.

Evidence of litter prevention benefits:

- Limited quantitative evidence to suggest that community campaigns reduce littering in a local area and generate a wider culture of litter prevention in the long-term;
- Anecdotal evidence suggests campaigns were more likely to influence behaviour if they were associated with local, long-standing campaigns or engaged a wide range of people;
- Differing levels of litter prevention impact were reported, some projects appeared to have a limited visible impact on litter reductions whereas others reported to have prevented flytipping; and
- Conceivably, for shorter-term campaigns the potential to produce sustained behaviour change might be limited as less local people would be involved or come into contact with it.

Key Advantages	Key Disadvantages
Community led campaigns are highly scalable and replicable, potentially making it a cost effective way to influence behaviour change. This is likely to be reduced for campaigns run by external organisations.	Risk of difficulties recruiting and motivating volunteers. For community led campaigns there is a risk that existing volunteers prefer hands-on tasks.
Embedding a campaign of local relevance into a community could increase the likelihood of it engaging prospective litterers through targeting local issues/concerns. Whereas campaigns run by external organisations have increase capacity to engage with a wider range of participants.	Hard to measure the impacts of a campaign and the resulting behaviour change.

The key considerations identified for maximising the success and impact of future projects are:

- Sustaining local momentum: external support may be required in the longer-term to ensure ongoing litter prevention. Community led campaigns needing help in targeting work and increasing participation;
- Best practice: sharing successful methods of engaging hard to reach groups and monitoring litter prevention levels will help develop models of best practice;
- **Enhanced communication**: by increasing campaign communication through a range of media to influence behaviour change; and
- Variation in delivery approaches: allowing communities to identify the areas and issues that
 they would like to address either at local, region or national level, to enhance likelihood of
 litter prevention.

Wider benefits of community campaigns are mostly dependent on a project's ability to influence behaviour change towards litter reduction. Improvements in local environmental quality could improve habitats for local wildlife, increase social cohesion as community use local spaces and reduce the need for local authority clean-up teams to work in the area. Participation in the development and delivery of the campaign could provide training opportunities for local residents.

Option 3: Monitoring and Citizen Science

In monitoring and citizen science projects volunteers undertake data collection and use a range of monitoring techniques under the guidance of professionals, the results of which are used to inform interventions and promote litter prevention to a wider audience. This approach could be incorporated into all other proposed options as a means of measuring pre- and post-intervention litter levels, supplementing more robust, professional data. There are a few examples of this option but it appears to be growing in popularity. This is attributed to the internet making communication of opportunities to get involved, provision of guidance and support and reporting of results easier and more cost-efficient.

Evidence of litter prevention benefits:

- Limited evidence available to demonstrate the ability of monitoring and citizen science to prevent litter;
- However, this option is being increasingly used, and applied to a number of different situations including within the litter component of the Eco-Schools programme;
- Intuitively, through working with schools the link between participation and behaviour change might be better understood in future years; and
- It logically follows that ongoing investment and improvement in monitoring and citizen science would increase the likelihood of litter prevention benefits.

Key Advantages	Key Disadvantages
An ability to engage people in local litter issues at a level which promotes understanding and awareness.	Risk that data collected and analysed is not suitably robust and does not deliver a sufficient quality for many applications, e.g. for including in national statistics. This does not necessarily diminish the litter prevention impact.
It helps to address the current shortfall in evidence of litter prevention projects and pilot studies.	Risk that the more specific focus of this option will discourage a wider number of participants and detract from other community action initiatives.

The key considerations identified for maximising the success and impact of future projects are:

Sustaining local momentum: by providing ongoing support to reduce project vulnerability. Helping to produce time-series data to allow long-term litter prevention impacts to be measured could also encourage long-term national involvement from projects and participants;

- **Collaborative working**: increasing cross-sector engagement may help to diversify participants and increase the number of monitoring projects in progress;
- **Best practice:** establishing a system of training and support would enable volunteers to conduct research with a consistent methodology so it can inform larger studies; and
- **Enhanced communication**: encouraging new volunteers to participate through the sharing of results in terms of littering prevention benefits, on a local and national scale, could help groups feel they are part of a larger scheme or movement.

This option could also generate a range of wider benefits such as an increased sense of local pride and community cohesion though jointly tackling local litter and providing opportunities for volunteers to learn new skills, potentially improving their employment prospects.

Option 4: Incentives

Incentives can be used to motivate members of local communities who may otherwise show limited or no interest in a topic. They can also be used to encourage ongoing participation, e.g. rewards for commitment. Incentives can be financial or non-financial. Non-financial incentives may include opportunities to learn new skills or access to social activities. As well as motivating individuals, incentives can also be used at a community level. For example the best performing neighbourhood in a town wide scheme could receive new play equipment.

Evidence of litter prevention benefits:

- Case study evidence suggests that individual incentives are most successful at generating littering behaviour change and encouraging litter removal if they are skill or experience based;
- This is thought to be a result of the length of time that participants are engaged with a project; and
- The evidence suggests that community-level incentives reduce and prevent litter if they are appropriately targeted to engage a representative proportion of a population over a series of months or years.

Key Advantages	Key Disadvantages
Ability to specifically target hard to reach groups or individuals, based on the type of incentive offered.	Case studies show a reliance on partnerships, e.g. local businesses, to provide or fund rewards.
Interviewees suggested that competitions and annual award based incentives are successful at sustaining group engagement.	Anecdotal evidence shows that the litter prevention benefits reduce dramatically once the incentive is removed.

The key considerations identified for maximising the success and impact of future projects are:

- Sustaining local momentum: providing ongoing encouragement to groups through awards and competitions can make them feel they are part of something bigger and acknowledge their participation;
- Collaborative working: building partnerships with local organisations and businesses could increase the number and appeal of awards available;

- Best practice: sharing successful methods of engaging hard to reach groups and monitoring litter prevention levels could help to develop a model of best practice; and
- **Enhanced communication:** promoting activities and respective rewards widely could help to broaden participation.

The wider benefits which result from incentives will vary according to incentive type. These could include transformation of space, improvement in local environmental quality, physical and mental health benefits of outdoors social activities and the potential to learn new skills and gain experience.

Option 5: Wider Community Approaches

Option 5a: Community Green Space and Street Improvements

This option includes a wide range of community-level improvement projects, from community gardening to intensive street redesigns, facilitated by external organisations. These projects aim to influence behaviour change through empowering local residents to make improvements to their local environmental quality and could potentially be adapted to include a litter prevention element.

Evidence of litter prevention benefits:

- Whilst most projects are not focused on litter, there is anecdotal evidence that litter and flytipping is visibly reduced in the local area; and
- The evidence suggests that environmental improvements, such as planting, and other
 aesthetic deterrents to depositing waste, can lead to enhanced civic pride and a greater
 sense of guilt by (potential) litterers, making them take responsibility for their waste.

Key Advantages	Key Disadvantages
Potential to work with external organisations - this has been reported by numerous projects as a successful way of increasing participant numbers and diversity.	Potentially challenging to inspire existing groups to include a littering element in their project when they have broader environmental goals.
A large number of groups exist who are already active; providing the opportunity to develop their projects to include a litter aspect and better communication of local success.	Risk of local groups not sustaining their initial momentum, reducing the potential to prevent littering. Risk of social barriers or community conflict preventing a cohesive approach or reducing participation.

The key considerations identified for maximising the success and impact of future projects are:

- Sustaining local momentum: by providing ongoing support to reduce project vulnerability
 from reliance upon a few key volunteers, and encouraging new participants so that
 communities are more diversely represented;
- Collaborative working: projects may be able to access a broad range of funding schemes but the subsequent number and spectrum of funding requirements may push litter down the agenda;

- **Best practice**: evaluating current examples of best practice in assessing litter prevention impacts could be used to advise and encourage pilot projects integrating these features;
- Variation in delivery approaches: different communities are at different levels of litter
 awareness and concern, leading to a range of priorities to address, but litter prevention
 must still be considered fully in project planning in order to maximise the desired outcomes;
 and
- **Limitations to approach:** there is potentially a limit to the number of areas that could be 'greened' and this option may require higher levels of capital investment per project, reducing its scalability.

This option has the potential to transform local spaces, increase community cohesion, improve local environmental quality and potentially give local people the opportunity to learn new skills.

Option 5b: Wider Community Building

This approach is based around the principle of developing a sense of community and empowering residents to address local issues such as littering. It involves a few local people collaborating with neighbours to arrange an event, e.g. street party or street play activity. The event then enables people to get to know each other, building the sense of local community and increasing the sense of ownership of local spaces. The resultant sense of community and empowerment, alongside residents spending time in community spaces, were identified as being key factors for heightening awareness and concern about littering, leading to a positive behaviour change.

Evidence of litter prevention benefits:

- Case studies for this option have thus far not contained litter prevention objectives; the
 projects aims are most commonly social rather than environmental. The litter prevention
 impacts have therefore not been reported;
- However, there are some examples where groups have conducted clean-ups prior to an
 event, leading to attendees noticing the improvement and arranging subsequent clean-ups.
 This heightens local awareness of litter although any sustained change as a result of this is
 not reported; and
- This type of approach has also been shown to lead to local projects which improve the
 aesthetic and use of public spaces, potentially reducing littering.

Key Advantages	Key Disadvantages
Potential to attract a wide number of participants who may not normally get involved in litter focused or community activities but want to participate in a fun, social event.	Risk that litter prevention potential will be lost if support not is not available to direct community empowerment towards addressing littering.

Key Advantages	Key Disadvantages
Any litter prevention is underpinned by increased civic pride in participants. Such behaviour change is thought to be deep rooted and long lasting.	Risk that events themselves may produce litter if waste is not well managed and the site is not carefully cleared afterwards. Leaving a littered site could have a negative effect on litter prevention. Risk of social barriers or community conflict preventing a cohesive approach or reducing participation

The key considerations identified for maximising the success and impact of future projects are:

- **Sustaining local momentum**: by providing ongoing support to reduce project vulnerability due to reliance on a few volunteers and ensure that regular events are held;
- **Enhanced communication**: considering how best to promote upcoming local events and encourage awareness of activities could help to recruit new participants;
- **Best practice**: monitor and evaluate success at integrating litter prevention into community building events to develop best practice to be shared with new and existing participants; and
- Variation in delivery approaches: helping communities identify local priorities for activities may result in litter being addressed as a lower priority but lead to increases in participant diversification.

There are a range of environmental, social and economic benefits which could arise from the greater community cohesion created by community building events. Spaces could be transformed for an event and then receive ongoing maintenance, social isolation may be reduced and volunteers can learn new event planning and organisational skills.