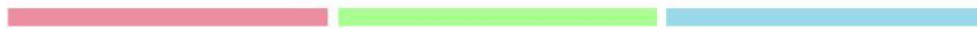


## Co-designing Improvements in Recycling Practices

Recommendations produced through deliberative dialogue between Hampshire local authorities, residents and housing agents carried out in partnership with the University of Southampton



**Report authors on behalf of the partnership:**

**Toby Roberts, Arjun Awasthi, Gabriela Ramos Bonilla, Heather Parsons and Mary Barker, University of Southampton**

**Corresponding author: Mary Barker – meb4@soton.ac.uk  
School of Health Sciences, Faculty of Environmental and Life Sciences and  
School of Human Development and Health, Faculty of Medicine**

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**University of Southampton:**

Ian Williams  
Paolo Spada  
Sue Littlemore  
Mike Harris  
Matt Ryan

## Foreword

Domestic squabbles about who takes out the bins are not the only controversy affecting the business of rubbish collection.

Recycling rates in Hampshire, at one time a national exemplar, have slipped back and the less we recycle the greater the cost to the environment and council budgets.

A memorable message from one local council member suggests the annual savings from correct recycling could fund several Macmillan nurses.

How to improve recycling behaviour amongst Hampshire residents is a challenge identified by local authorities, and one the University of Southampton has stepped up to in its role as a Civic University.

In 2023 the University signed a Civic University Agreement with five of its neighbouring local authorities: the councils of Hampshire County, Winchester and Southampton Cities, Eastleigh and Test Valley Boroughs.

In practice that means the University has a strategic determination to harness its powers of research, knowledge, innovation and civic partnership to help transform lives and livelihoods across Hampshire and the Solent.

In this project academics deployed a novel method of bringing together residents and council decision-takers to find solutions to the complex issue of how to improve recycling rates.

The findings are practical and the methodology represents nothing less than a compelling model for boosting democratic engagement.



**Sue Littlemore**

Director of Civic University  
University of Southampton



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# 1. The problem

It is very difficult for people in the UK to recycle properly. The current arrangements for recycling represent a ‘perfect storm’ - a combination of all the factors that makes a behaviour especially challenging to carry out habitually.<sup>1</sup> Namely:

- There is no immediate reward to the individual for recycling
- It takes effort to do properly
- Knowledge is required to understand how to recycle well, and
- It is unusual for people to get any feedback about how well or badly they are recycling.

Together, these features make it hugely challenging to change people’s recycling behaviour and to reduce contamination and improve recycling rates. The system in the UK for processing all waste, including the recycling system, is complicated and varies from one local authority to another, making it difficult to implement central government guidance, mandates or legislation.

In April 2026, however, all local authorities will be required to implement a new national standard of waste collection.<sup>2</sup> This will include domestic food waste collection and a set range of dry recyclable items that can be put in the recycling bin. In the case of Hampshire, this may not be possible until 2027/28 or later due to the need for new recycling facilities. This change is intended to increase recycling rates and reduce landfill or, in the case of Hampshire, incineration. Successful implementation will rely on new processes and systems, but more significantly, require communities to comply with the new regime. Contamination of recycling (putting the wrong things in the wrong bin) can mean large amounts of waste that could be recycled being diverted instead to landfill or incineration; in the case of landfill, this means the council and the public lose the environmental benefits and have to bear the cost of putting it in landfill. Whilst incineration has benefits because it generates energy, it is still a less desirable option than recycling in the hierarchy of waste that operates across the UK<sup>3</sup>.

Engaging communities in plans to support implementation of these new standards will be crucial to success; co-design of processes increase engagement, participation and empowerment of local communities<sup>4</sup>. Recent research recommends that future recycling strategies be co-produced with local communities and neighbourhoods to make sure that strategies are aligned with local conditions and needs<sup>5</sup>. This research also highlights the importance to local councils of developing communication materials that use appropriate language and are relevant to local needs and requirements. One difficulty is knowing how best to co-design or co-produce these strategies and materials. The University of Southampton has developed expertise in running co-production

processes using a strategy termed ‘deliberative dialogue’. This is designed to involve diverse representation from the target community and so obtain insights that it would otherwise be difficult to achieve.

Hampshire County Council – responsible for waste disposal – works with 11 local authorities on waste collection, and 2 unitary authorities (Portsmouth and Southampton) that manage both waste collection and disposal, and Veolia Environmental services, an integrated waste management contractor, through Project Integra. This project has received awards and commendations for good recycling practice. Project Integra is a partnership focused on managing and disposing of waste in a sustainable way, with the aim of minimising waste sent to landfill and maximising recycling and resource recovery. This collaboration resulted in the award to Hampshire of beacon council status in 1999; the council was an example of best practice in recycling and waste management. Since this time, recycling rates have plateaued and Hampshire has been left behind by better performing parts of the UK, such as Wales. The Materials Recovery Facility (MRF) in Hampshire is now outdated, having been built in the late 1990s and early 2000s. A new MRF is due for completion in 2027. Infrastructure alone cannot solve the challenges recycling creates, however, and Hampshire County Council is aware that it needs to prepare for the new national standard for waste collection. Hampshire performs well in terms of the volume of waste sent to landfill. They recognise, however, that considerable improvements in recycling practices are necessary.

A key challenge for recycling and waste management is communal housing. Housing type is a strong predictor of recycling behaviour. Rates of recycling are especially low where housing is managed by agents independent of the local authority and where communal facilities such as bin stores with large bins are provided in which residents are required to deposit their own household’s waste<sup>6</sup>. These types of communal bin stores make it difficult to hold individual residents accountable for their waste disposal, and the actions of one resident may contaminate the waste correctly deposited by others. Communal properties therefore represent a particular challenge and are acknowledged as settings that would benefit from a novel, co-produced approach to recycling<sup>7</sup>.

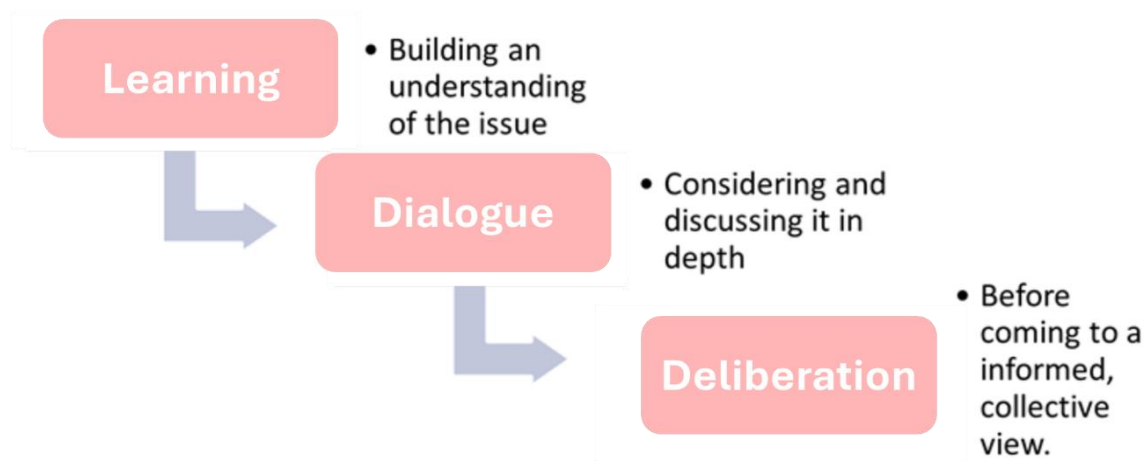
The University of Southampton/Local Authority partnership described in the foreword to this report therefore set out together to answer the following question:

**Does bringing together residents, council staff and housing managers to problem-solve improve relationships, understanding and ultimately recycling behaviour?**

## 2. How we addressed the problem

### The deliberative process

The deliberative process developed at the University of Southampton is designed to engage community members in dialogue with decision-makers in a way that involves a broader spectrum of members of the community and creates conditions in which community members don't just feel 'heard' but are actively involved in co-designing initiatives and civic activities. These then land better and have more impact in the community than those designed by decision-makers alone. The process by which this deliberative dialogue takes place is illustrated in Figure 1 below.



**Figure 1.** Deliberative dialogue process

Deliberative dialogue is a structured form of discussion that emphasises thoughtful, respectful, and inclusive communication to explore complex issues and build mutual understanding. This informed collective view can then be used to influence policy and decision-making. This form of engagement supports more responsive, transparent, and democratically legitimate co-developed solutions.

Traditional methods like surveys often capture quick, surface-level opinions from the public. In contrast, deliberative public engagement gives decision-makers a different kind of insight:

- Thoughtful and informed opinions, based on facts and listening to others
- A clearer picture of what really matters to people and why
- An understanding of where people agree or disagree, and why some agreement may not be possible

## **Aim of this project:**

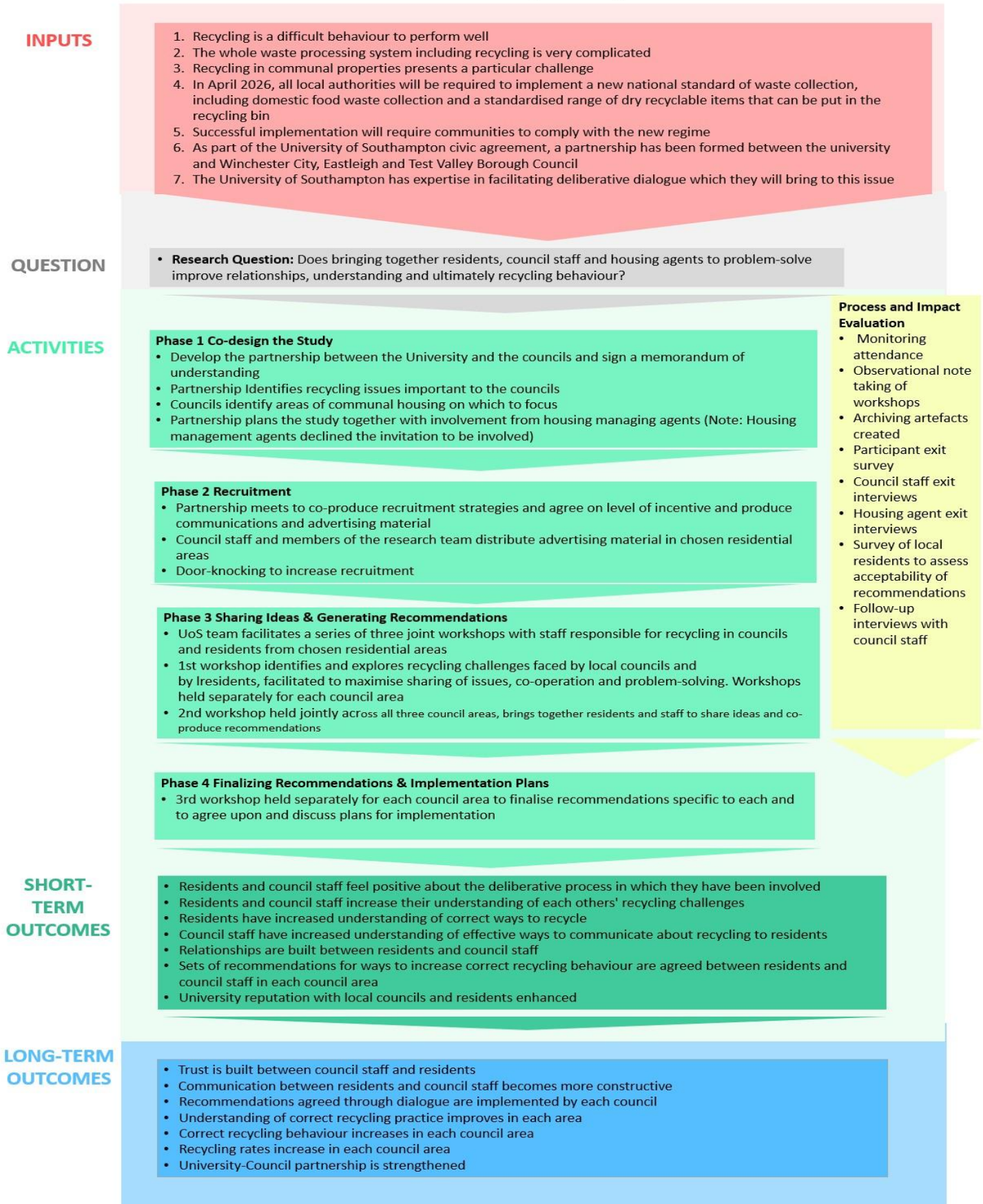
To use deliberative dialogue to enable the three Hampshire local authorities, namely Eastleigh, Test Valley and Winchester, to develop strategies that deliver on their statutory recycling requirement in a way that engages with, and addresses the needs of, local communities.

## **Our Theory of Change**

The Theory of Change in Figure 2 maps out why and how we think this process of deliberative dialogue will achieve the long-term goals of improving recycling rates. It shows the way we expect the activities that took place as part of the project to produce the outcomes we want.



## Co-designing improvements in recycling practices A Theory of Change



**Figure 2: Our Theory of Change**

## What we did

### Phase 1: Co-designing the study

Representatives from three council areas in Hampshire – Test Valley (TVBC), Eastleigh (EBC) and Winchester (WCC) – came together with the University of Southampton’s Civic University team to develop ways of improving recycling rates and behaviour in preparation for the introduction of the new national standard in 2026. Over the course of three meetings and some sharing of each other’s experience and expertise, a plan for a deliberative dialogue was co-designed that followed the format in Figure 1.

### Phase 2: Recruitment

Communal housing areas were selected by the local authorities (shown in Table 1). These were selected because they are locations where recycling represents a challenge for the local authorities. The properties in WCC and EBC are all owned and managed by the local authorities, whereas in TVBC they are managed by managing agents.

**Table 1.** Targeted communal housing areas by local authority area.

	<b>Winchester City Council (WCC)</b>	<b>Eastleigh Borough Council (EBC)</b>	<b>Test Valley Borough Council (TVBC)</b>
<b>Targeted locations</b>	Thurmond Crescent (30 flats, 5 blocks of 6)  Woolford Close (47 flats, 2 buildings))  Total – 77 residences	Bandstand Court (49 residences)  Postmark Place (26 residences)  Total – 75 residences	Brocade Road (87 residences)  Flitches Grove (48 residences)  Total – 135 residences
<b>Managed by</b>	WCC owner and landlord	EBC owner and landlord	Vivid, Abri
<b>Materials collected from property</b>	Paper Cardboard Plastic bottles Tins & Cans Aerosols Glass bottles and Jars	Paper Cardboard Plastic bottles Tins & Cans Aerosols Food waste Glass and batteries	Paper Cardboard Plastic bottles Tins & Cans Aerosols

Posters advertising the project and asking residents in these three housing areas to sign up to take part were designed collaboratively with the local authorities, with each council deciding on a slightly different style (see Figure 3). Residents were offered an incentive of £250 for taking part in the deliberative dialogue.



**Figure 3.** Examples of posters developed with the local authorities



**Figure 4.** Timeline of recruitment stages.

Flyers and letters were delivered through individual letterboxes in all three areas, and posters were also displayed in bin stores in EBC and TVBC (see Figure 4). Door knocking to speak to residents face-to-face and to increase recruitment was carried out during the following week. Those interested were informed that the application deadline was two weeks before the first event.

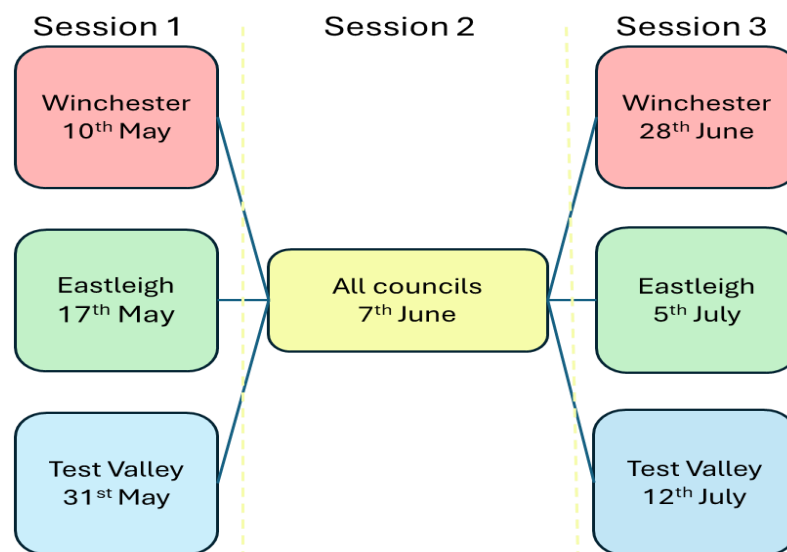
The residents		The council staff	
<b>Age groups</b>  18-24 - 5.6% 25-34 – 38.9% 35-44 – 38.9% 45-54 – 5.6% 55-64 – 5.6% 65+ - 5.6%	<b>Ethnicity</b>  White background 66.7% Asian background 27.8% Black background 5.6%	<b>Eastleigh Borough Council</b>  Doug Miller – Waste project coordinator Heather Sellen – Recycling Officer	<b>Test Valley Borough Council</b>  Andrea Harris - Community Engagement Officer Jana Binderova – Recycling Development Officer Kayla Everest – Recycling Development Officer
<b>Disability / additional needs</b>  No 89% Yes 11%	<b>Gender</b>  Men 50% Women 50%	<b>Winchester City Council</b>  Clare Satterly - Communications Officer Kaylee Shaw - Waste and Environmental Services Programme Manager Lupita Landeros – Waste and Recycling Project Officer Ian Burt – Contract Manager	

**Figure 5:** Details of residents and council staff who took part in the sessions

**N.B.** Managing agents in TVBC were approached but were unable to provide staff to work on Saturdays when all the sessions were to be held. Two agents from the housing association Abri offered to provide feedback on the recommendations once the process had been completed. Their views are reflected later in this report, though they were not part of the co-design process.

### Phase 3: Sharing ideas and generating recommendations

The deliberative dialogue was delivered over a series of 3 sessions. The first and last meetings were held separately with residents and council staff in each area. The middle session was attended by residents and council staff from all areas together. Figure 6 shows the dates of the three sessions, and which councils were involved.



**Figure 6.** Dates of the three sessions and which councils were involved.

**Session 1** focused on problem identification, with the residents and council staff working separately at first to list the problems and challenges posed by recycling, before coming together into a larger discussion to identify the problems perceived by both groups.

**Session 2** brought residents and council staff from all three areas together, allowing exchange of ideas and best practice between areas. This process began with residents being separated into three groups and rotating around three different tables where council staff were sat. The three tables focused respectively on local ideas, big ideas, and communications. Local ideas allowed residents to discuss their ideas with recycling staff from the three local authorities, enabling residents to understand what is feasible, what already happens in other areas, and what constraints might impact any ideas they have. The big ideas table focused on best practice from around the world and encouraged the residents to ask questions of academic experts on recycling. The communications table allowed residents to see recycling communication materials from other council areas, decide what was important to them in the way information was communicated, and



discuss these ideas with communication and community engagement officers from the three local authorities. Following on from this, residents were once again grouped with their own neighbours and local authority staff, asked to create a list of recommendations and rank these in order of priority.

#### **Phase 4: Finalising recommendations and implementation plans**

**Session 3** involved revisiting and refining these recommendations, ensuring everyone was in agreement about how to prioritise them and then develop plans for their implementation. Council staff also took this as an opportunity to tell residents and researchers about the changes they had already implemented based on what they had learned from the sessions already held.



### 3. Recommendations for change

The recommendations for changes to recycling practices produced for each council area are given in the following pages in the form of **posters**, one per council area. These posters also display the barriers to correct and successful recycling identified by residents. The recommendations in each poster are intended to be implemented or discussed in the council areas from which they originated.

# EASTLEIGH

## The recommendations

<b>1. Local recycling champions</b>	Community members leading by example and encouraging sustainable habits. May need to be led by the residents themselves.
<b>2. Benefits for recycling</b>	Benefits of recycling should be more clearly communicated to residents through communication material.
<b>3. Recycling competition and prizes</b>	Would require additional resources which poses a challenge. Can be encouraged through approaches like the food waste heroes campaign.
<b>4. Clearer simplified messaging</b>	Has to be simple and clear. Recycling information could be delivered with council tax bills. Residents can join the borough newsletter. Posters in communal areas such as by lifts may help raise awareness.
<b>5. Penalties</b>	Difficult to identify responsibility in shared bin stores. Management companies would need to enforce/issue penalties. Councils can't re-visit residents without charging. Additional trips incur costs not in the original budget. CCTV/key cards discussed but pose issues if lost and don't allow identification of visitors. Penalties may therefore be hard to enforce.
<b>6. Educational campaigns</b>	Supermarket events – limited due to resource constraints. Educational videos could be used and already exist eg "let's sort it" videos. Food waste heroes to engage the community and cut food waste.
<b>7. Deposit return schemes</b>	Will be introduced nationwide in the future. Start date unclear at present.
<b>8. Recognition system</b>	Positive feedback desired - Proposed traffic light system to score bin stores. Management companies could offer incentives to high-performing bin stores.
<b>9. Clearer displays and information around housing blocks</b>	Management companies could make better use of noticeboards to include facts and figures about recycling.
<b>10. Recycling app</b>	Idea considered unfeasible due to high costs and lack of success in other areas such as Southampton.

## Barriers to recycling

### Mobility Challenges:

Residents with disabilities or no vehicle struggle to transport their recycling.

### Damaged Infrastructure:

Broken bins (e.g., handles) make recycling more difficult.

### Language and Cultural Barriers:

Some residents cannot understand recycling instructions.

### Contamination Issues:

Incorrect use of bins leads to entire loads being rejected. One incorrect item can ruin good work of others.

### Food waste access:

Some areas lack food caddies entirely.

### Cost Transparency:

Improper recycling increases council costs. Participants want to understand the financial impact of good vs bad recycling.

### Communication Gaps:

Bin labels are unclear or overly negative, and residents don't know the consequences of small mistakes.

### Negative Focus:

Recycling communications often emphasise what not to do and little recognition of good behaviour.



# TEST VALLEY

## The recommendations

### 1. Focus on creating less waste

Encourage extended producer responsibility (2026). Nationwide deposit return schemes to come into force. Promote buying less/low-packaging products via existing campaigns. Support zero-waste through council action and improve access and awareness of refill shops/delivery. Incentivise small businesses to increase action towards zero/low waste, such as raising awareness of external grants and incentives through communication channels. Encourage repair cafés, reusable nappies, and continue current education initiatives in schools. Measure impact by tracking success of campaigns.

### 2. Improve communications

Need to assess effectiveness of existing material and support existing campaigns e.g. Recycling stars, Love Where You Live, and current food waste collections and recycling. Focus on how much food waste is produced to educate residents and use competitions as a way to galvanise food waste action. Council to focus on reducing waste first, and recycling second. Create series of 2 min videos with members of these discussion groups, ambassadors for recycling, what they have learned. (Use the ambassadors to run events). It is important to identify ways to maintain these activities. Change can be created over time with improved communication, changing social norms and societal tipping points around recycling and food waste. Changes in percentage rates of food waste and recycling can be used to identify progress.

### 3. Improve kerbside and other waste collection services

The Environment Act/ Simpler recycling dictates what can and can't be collected, so some changes cannot be implemented. Glass can be collected from 2026 when the central government mandate comes into force, however this will only be possible when the new MRF is available. Collections of small electricals, batteries and vapes are due to be introduced. Changes introduced as part of Simpler Recycling will help. Newly built flat bin stores should be designed to accommodate this.

### 4. Management agents need to take more responsibility

Fear of managing agents passing on charges to residents in increased service charges is a significant problem. Management agents need to not pass on costs to residents in service charges, and work to address this perception. Examples of good management agents could be highlighted, such as a good management agent's charter.

New developments are scrutinised for waste plans, and recycling team could work with planning departments to ensure new developments' bin stores and waste collection facilities are sufficient and proportionate to the development.

## Barriers to recycling

### Communication challenges and knowledge gaps:

Many residents are unaware of correct recycling practices.

Recycling logos on products are confusing or misleading and they don't reflect local rules.

Stickers on bins are often ignored.

### Consequences of Mistakes:

Contamination by one resident can spoil recycling for everyone.

Mistakes lead to extra costs, potentially passed on to residents.

Residents fear managing agents may fine or penalise them unfairly.

### Lack of motivation, pride and enforcement:

Lack of local pride contributes to low participation.

Fining residents is difficult and often ineffective.

Residents are hesitant to report problems due to fear of blame or charges from the managing agents.





# WINCHESTER

## The recommendations

<b>1. Management agents and landlords should provide information about recycling for new tenants</b>	The recycling team needs to talk to housing officers where WCC is the landlord to coordinate. Conversations in Winchester have already started and Abri have already started to use the new material produced by WCC as a result of this project.  Positive consequences of recycling where money could be saved and how it could be spent e.g. potholes could be communicated to residents and new tenants, and communicated widely.
<b>2. Clearer communications material</b>	Use big, clear A3 stickers, signs/stickers. More pictures, less text. Handy tool (e.g. Wheel, leaflet, stickers) to make clear what can be put in the recycling. Only pictures of things that should go in. Focus on main contaminants (e.g. Plastic bags) General iconography rather than photos .  For bottles, need a range of shapes so people know it's not one specific shape that is allowed.
<b>3. Share information about the cost of not recycling and contamination</b>	Share information about the cost-saving of recycling properly, and what that money would be spent on. Information on cost-saving could go out with the council tax bill, the one thing most people read and remember receiving. Recycling information will be included with the annual bin calendar. Information about the positive impacts of recycling could be included.
<b>4. Education about the whole process of recycling from house to recycling centre. Trips to the MRF (Materials Recovery Facility)</b>	Veolia allows a limited number of people to visit every year, so it is difficult to arrange enough trips. The council can make presentations accessible for the public about recycling, such as about what happens to plastic bottles.  Animated or video presentations, highlighting all the information in one place. Examples of videos from other councils, examples of good practice could be used.
<b>5. Community leaders as local recycling champions</b>	Identify community leaders through Facebook groups, nominated or self-nominated leaders with which WCC can share information in community groups. Engage with local schools and school groups to educate young people.
<b>6. Allow for communal buildings to accommodate recycling in planning</b>	New developments need to include sufficient space e.g. kitchens to have space for general waste, recycling, and food waste. Bin stores also need to have capacity for all these bins. The Council's recycling team should have discussions with the council planning team to develop guidance for new developments' waste and recycling.
<b>7. Deposit return scheme</b>	Deposit return scheme will be introduced; however, it is a national scheme, and local authorities have limited input. Local authorities can educate people about the scheme when it is available.

## Barriers to recycling

### Lack of motivation and pride:

No incentives or consequences for recycling behaviour.

Low sense of community pride or shared responsibility.

### Operational issues:

Bins are sometimes missed or go missing, and collection frequency is insufficient.

Green bins fill up quickly, forcing use of black (non-recycling) bins.

Limited physical space for extra bins.

### Communication challenges and knowledge gaps:

Need clearer and simplified information.

Clear images are useful and suitable for people who don't speak English as a first language.

### Infrastructure challenges:

Glass recycling facilities are too loud. People feel embarrassed or ashamed using noisy glass banks in public.





## 4. What we have learned

Data was collected during the project describing:

- Attendance at sessions
- What happened during the sessions
- Artefacts created during sessions
- Residents' views on the project
- Council staff views on the project
- Housing agents' views on recycling issues

We have brought together all of this information into a set of findings about how to support better recycling and about the way the project was run.

### What we heard about recycling

#### **Clearer communications materials**

Residents asked for communication materials with less text and more images indicating what can and cannot be recycled. Council staff responded positively to this suggestion and cooperation and communication between the three local authorities during the process led to rapid change in communication materials, with two of the LAs (WCC and EBC) introducing new materials such as posters and fridge magnets. These changes were implemented whilst the project was ongoing. The housing agents remarked on the clarity of the new communications materials which they had begun to use in their housing blocks and bin stores in Winchester.

#### **Lack of penalties and incentives**

Residents and council staff across all three areas highlighted a lack of positive incentives or negative consequences, such as fines, for recycling. They also suggested that more information about the benefits of recycling would be helpful in persuading people to recycle better. In a powerful example, a council member from TVBC explained that savings from correct recycling could be equivalent to the amount required to annually fund and support a significant number of Macmillan nurses. Whilst this money would not be spent on this, it was a useful example to illustrate potential saving. All parties in the dialogue, including the housing agents, suggested more practical incentives, such as the deposit return scheme due to be introduced by central government, would work to increase good recycling behaviour.

### **Current infrastructure and the need to maintain it effectively**

All parties to the dialogues were aware of the importance of waste processing infrastructure in shaping recycling behaviour. From the design and maintenance of the communal bin stores to the colours of bins and the complex and long chain of processes involved in waste recycling were all felt to make it more difficult to achieve better recycling rates. Dirty and damaged bin stores were felt to be responsible for a lot of the failure to recycle properly in communal properties.

### **Recognition that better recycling needs more than just people to try harder**

Residents felt that there was too much emphasis placed on them taking responsibility for better recycling when actually the infrastructure was not there to support them. From the councils' point of view, many of the infrastructure changes, e.g. instituting kerbside collections or providing financial incentives for recycling, were beyond their budgets or their mandates. Hence their focus on communications and signage. These were easy to implement and cheap but were also based on the assumption that the only things stopping most people recycling properly was that they didn't understand how to. Improved communications only address one of the factors that prevents better recycling (see the opening paragraph of this report).

### **Difficulties tracking progress towards better recycling**

Tracking progress remains a challenge, with councils relying on tools such as contamination reports, website visits, surveys, and resident feedback; many lack dedicated resources for systematic tracking.

### **Lack of local pride and shared responsibility**

Both residents and council staff believed that lack of pride in the places where they lived meant that some people simply didn't care enough to recycle properly. This led to contaminated waste in shared bins which led to delayed or no bin collections, and in some cases, meant financial penalties from landlords for all residents in the blocks. Residents wanted to find ways to penalise those individuals responsible. The housing agents explained that without incontrovertible evidence of their responsibility, e.g. provided by CCTV footage, they were unable to penalise them directly.

Commenting on this, representatives from Abri, the only housing agent that took part in the project, suggested that poor recycling behaviours were a reflection of lack of social connectedness between residents in the blocks and between residents, agents and council staff. They reported working hard to increase trust with all parties and so foster a sense of collective responsibility for waste management but also for all other aspects of maintaining a pleasant living environment. They admitted that it was difficult to interest most residents.

## **What we learned about running the project**

### **Think hard about a recruitment strategy**

The recruitment strategy successfully produced a diverse sample (see Figure 5). The involvement of council staff in the recruitment process was really helpful in involving residents who might not normally share their opinions on such things. They provided a diverse range of views on the challenges of recycling.

Recruitment proved challenging. Sessions were scheduled for Saturdays to allow working residents to take part. This was a problem for those with children, those who work weekends, and for those unwilling to commit to attending three Saturdays during the summer, especially with some during school holidays. Alternative scheduling, such as evenings midweek, may have addressed some of these issues. The benefits in forming relationships of running the sessions in person was felt to outweigh the fact that it made it more difficult for some to attend. However, the practicalities of running 7 workshops requires that some of the timings will not suit everyone.

We noticed that the placement of promotional materials had an impact on recruitment. Posters displayed in bin stores in EBC and TVBC generated high levels of online sign-up to the project whereas in WCC, where this was not possible and materials could only be distributed door-to-door, no participants used the QR code to sign-up online. In WCC, recruitment relied heavily on door knocking and the incentive we offered for referring others who participated.

### **Offer exactly the right incentive in the right way**

An incentive of £250 for attending all sessions was offered. Whilst for some this was very attractive, it's financial value made others suspicious that it was a scam. Some expressed a distrust of QR codes - the main way for participants to sign up. If we were to do this again, we would either reduce the size of the incentive or make it more obvious that the project was endorsed by the local council. We will also offer alternative registration methods than QR codes and web links. The decision to offer the full £250 only on completion of all three events may also have deterred potential participants. We may have had more recruits if we'd offered payment for each individual session attended.

### **Try harder to reach disengaged residents**

It was predictably difficult to engage participants who are not already committed to recycling. During door-knocking, some residents expressed strong views making it clear they had no interest in taking part, despite the payment. It is not obvious how to overcome this, but some commentators suggest that spending time building trust with people from these communities and identifying exactly what might incentivise them to take part might have increased recruitment of the disengaged<sup>8,9</sup>.

**Work harder to involve housing agents and managers**

The absence of housing agents and management companies from the deliberative process was identified as a barrier to progress; their involvement was considered important for building accountability and shared responsibility for improved recycling. In discussions held after the deliberative process, housing agents indicated that they had been hesitant to participate. This reflected concerns about being unfairly held responsible for issues extending beyond their own remit.



## 5. How do we improve recycling rates?

We are aware that there are few opportunities for local authorities to invest in recycling. The list below represents an evidence-based ‘wish list’ of actions. In the short term, those who took part in this project agreed that a number of small-scale, focused actions combined with sustained communication and stronger collaboration with housing managers are the most realistic levers for behaviour change.

- **Ensure residents know exactly what can and cannot be recycled**  
Simple, consistent imagery in stickers and designs with a minimum of text visible on bins and in posters in public places will increase understanding of good recycling practice.
- **Expand the opportunities for better recycling**  
Better maintained and expanded waste collection infrastructure, including cleaner, better-lit communal bin stores, more kerbside collection services and modernised waste management facilities will make it easier for people to recycle better.
- **Legislate to motivate people to recycle better**  
Enforce penalties for poor recycling and offer incentives for good recycling. In Wales, statutory requirements supported by a balance of incentives and penalties have contributed to markedly higher recycling rates. Although households are not fined for failing to recycle, individuals may receive fixed penalty notices of up to £100 for bin misuse or contamination, with more severe sanctions for fly-tipping. Incentives such as weekly food and recycling collections, often more frequent than residual waste collections, and the availability of low-cost reuse shops at recycling centres make recycling the more convenient and attractive option<sup>10,11</sup>.
- **Promoting local champions**  
Encouraging greater responsibility and accountability can be achieved by empowering community members to act as recycling “champions.” These volunteers can disseminate knowledge, answer questions, and motivate peers to engage in recycling practices. Such grassroots initiatives not only spread information but also strengthen social norms around sustainability and collective responsibility.
- **Making recycling simple and accessible**  
Simplifying the recycling process increases participation rates. Programmes such as *Simpler Recycling*, which provide households with straightforward, user-friendly systems, demonstrate that making recycling less complex reduces barriers to action<sup>12</sup>. By streamlining categories and processes, people are more likely to recycle consistently.



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