

Site design

Careful site design and layout can encourage use of bring banks, increase tonnage collected and reduce contamination, vandalism, graffiti and fly-tipping. Clear concise signage, carefully positioned information on containers and the co-location of banks for similar materials are all likely to improve performance. Other important issues are ensuring the site is well-lit and safe for the public and that there is sufficient space to access containers for emptying / servicing.

Issues to consider

Site design

- Sites should appear permanent and attractive to encourage use and discourage misuse.
- Sites should be safe, welcoming to use and well-lit (where possible) to ensure users are not discouraged.
- Design out potential for vandalism and fly-tipping by ensuring that sites are visible from a distance, not obscured by fencing or hedges and have sufficient lighting at night time. Once a site is vandalised or attracts fly-tipping, the more likely it will be prone to further incidents unless the site is adapted or proactively managed.
- Consider minimising gaps between or behind containers to reduce the risk of fly-tipping and littering. It can also be helpful to provide litter bins, as long as they are of a suitable size and emptied frequently.

Case Study: Luton Borough Council operates 48 bring sites. Kerbside collections of glass started in October 2008, resulting in a significant reduction in bring site glass tonnage. This led to a change in bring site management. Sites with frequent fly-tipping incidents were refurbished and since then there has been a reduction in littering and fly-tipping incidents.

Luton Borough Council Popes Meadow bring site – before refurbishment the site was experiencing problems with littering and fly-tipping.



The same site after refurbishment – one type of container installed but different apertures for different materials, consistent style of signage on all containers, gaps between containers removed to reduce opportunity for depositing waste.



Signage

- Clear and concise signage and information should be displayed at all sites and there should be sufficient labelling of containers, to avoid confusion and encourage correct use.
- Have a clearly marked drop off point or parking area to make use as easy as possible.
- Try to make branding and instructions uniform at sites and across all sites. Avoid over-complicating, or confusing site users, with a wide array of branding e.g. council, contractor, reprocessors. For more guidance on branding, see the fact sheet on *Communicating bring site recycling services*.

Access

- When planning the site, consider the typical users, whether pedestrians and/ or users with vehicles. Gather knowledge of the area and potential footfall, and discuss site design options with the local community to understand local requirements and foster site ownership.
- Ensure that to get to containers, people do not need to cross private property, and that access to private property cannot be gained easily by climbing over containers.

Local impact

- Consider the impact of the site design on the local environment and area. For example, a site located on the side of a busy highway may create traffic issues if there is inadequate parking or space for collection vehicles.
- For sites close to residential areas, consider noise reduction measures such as signs stating that sites should only be used between certain hours (e.g. between 8am and 8pm) or lining glass containers with rubber.

Facilitating collections

- Consider the collection and maintenance schedule, including types of vehicles and frequency of emptying, and what access is required to service the containers.
- Consider how to prevent containers being moved illegally yet making sure they can be lifted for emptying. For wheeled bins, fix containers on hard standing with locks or bolts to prevent movement.
- Consider clearly marking/painting the ground at a site, especially on space constrained sites, to clearly indicate the area for containers and areas that should be kept clear for collection vehicle access. The use of bollards in larger sites could prevent/reduce recurrent siting of rogue banks.
- Avoid awkward placement of containers on site that could inhibit accessibility to the site, particularly for large collection vehicles.

Container choice

As well as the guidance on selecting containers provided in the separate fact sheet *Selecting containers*, there may be site-specific factors that can influence container choice and site design.

- How many banks for different materials can the site practically accommodate?
- If the site as currently configured cannot accommodate all the desired materials, could capacity be provided for these materials by changing the type/capacity of containers used?
- Be aware that the space requirements for collecting containers will vary: for example, a lorry mounted hiab crane may be required to empty a paper bank might require.
- If containers are regularly overflowing, consider whether more or larger containers are required, or whether the collection schedule should be changed.

This site has co-mingled bring banks and easy access for vehicles to service the different containers on site. Source: Cannock Chase Council



Analysis of tonnages of material collected at bring sites in England since 2006 shows that recyclables collected co-mingled have increased from ~7,500 tonnes to ~21,700 in 2010/11. This has often been to enable collections from bring sites to be included in kerbside collection rounds.

The [Non-Waste Framework Directive](#) and [Environmental Permitting Regulations 2010: S1 – Storage of waste in secure containers](#) provide information on the storage of recyclables prior to their transfer for further recovery or reprocessing. The Agency's document gives guidance on what may be exempt from environmental permitting, this includes materials collected and stored separately. The storage of mixed wastes or co-mingled dry recyclables would need to be carried out under an Environmental Permit.

From January 2015, local authorities should also take steps to make sure that their arrangements comply with the requirements of the Waste (England and Wales) Regulations 2011 (as amended) and those of the revised Waste Framework Directive in relation to the separate collection of waste.

Frequently asked questions

How can I quickly measure individual site performance to understand the impact of improved design?

If information is unavailable for individual locations, consider establishing a monitoring schedule with the collection operator recording collection frequency and container volumes. You could then compare performance of a site before and after the site re-design and consider whether the changes made are worth replicating at other bring sites in your area

Which elements of site design have the greatest impact on performance?

It is difficult to break down which elements of site design, or re-design, have the greatest impacts. Signage, containers, surface, layout, and cleanliness all have an influence on performance so unless you change just one factor at a time, it will be difficult to gauge. If you are considering re-designing your site(s), consult local residents and your collection crews, who visit different sites, to gather their views and help identify improvements.

Checklist

- Provide sites on a hard surface to accommodate containers and collection vehicles.
- Ensure there is adequate capacity for the materials to be collected at each site. Decide on the number of containers required at the site based on the number of materials to be collected and expected usage/ tonnes collected.
- Consider accessibility for servicing and cleaning, and for site users (i.e. distance from nearest parking).
- Consider methods to deter littering and fly-tipping – such as providing litter bins – and to prevent congestion – for instance, by painting “no parking” on the ground.
- Consider use of bollards in larger sites to prevent siting of rogue banks. fly-tip
- Make sure the containers chosen are suitable for the site.
- Provide clear and concise signage and consistent branding on containers.
- Sites should be well lit, visible from a distance and not obscured by fencing or hedges.
- Discuss site options with the local community to improve the design and to foster ownership.