

Project Highlights

Food waste recycling was arranged at 5 outdoor events in Brighton & Hove with the aim of finding out what are the key success factors in delivering effective food waste recycling at outdoor events.

The case study events varied in the waste management arrangements in place and recycling rates of up to 55% (including 27% food waste) were achieved at one of the events. Across all events 41% of the 31.9 tonnes of waste collected was recycled with a total of 1.2 tonnes of food waste recycled by anaerobic digestion.

Background

The city of Brighton & Hove hosts hundreds of events every year on its open spaces. In 2010 the council was the first in the UK to achieve certification to the International Standard for Environmental Management ISO 14001 and the new International Standard for Sustainable Events ISO 20121 that was developed to drive sustainability performance at the London 2012 Games.

The city's [Sustainable Events Programme](#) supports event organisers to identify the simple actions they can take to deliver positive sustainability benefits through their events. This approach is working well for most areas of sustainability, but for a few areas the barriers are too great and a further intervention is necessary.

Food waste is a challenge for a number of reasons. Firstly, there are very few options for dealing with food waste on the South Coast, with a particular lack of anaerobic digestion capacity. Secondly, food waste recycling is expensive, typically 10 times more expensive than mixed waste recycling. Finally, conventional event food packaging, e.g. expanded polystyrene cannot be anaerobically digested and contamination levels of recycling at outdoor events is generally higher than in controlled environments such as offices.

Right: Recycling area at the Brighton Big Screen



Project Description

The aim of the project was to work with local recycling company Brighton Paper Round to trial provision of food waste recycling at 5 outdoor events in Brighton, using the resources and knowledge developed for the London 2012 Games on food waste recycling. Funding was secured through the ERDF FoodWISE Project with Oxfordshire County Council as lead partner.

Working with event organisers and caterers, the project involved developing new eye-catching event specific communications to test different types of collection facilities and communications with event participants, supporting caterers to use compostable food packaging and weighing the waste and recycling produced.

The Events

Brighton Big Screen was a month long event held on Brighton Beach during June and July 2014. The event organisers were interested in reducing the environmental footprint of the event; they had chosen local caterers and engaged Firefly Solar to provide power to the site using solar power and biofuel generators. We worked with caterers to provide anaerobically digestible food packaging and with event staff to make sure the right things were going in the right bins.

Below: Event specific bin signage developed for the Brighton Big Screen



As the first event, many issues arose that affected recycling rates and a total of 38% of all waste from the event was recycled. For example, we learned that particular focus should be paid to the site break down to ensure anything that can be recycled is recycled. Also, recycling contamination increases significantly with alcohol consumption and increased visitor numbers. We found that with the right staff engagement, back of house recycling was subject to far lower levels of contamination and for some events, focusing only on back of house recycling would be the most effective option.

The London to Brighton Veteran Car Run takes place every November starting at Hyde Park and ending at Madeira Drive in Brighton. It was a one day ticketed event with hot catering provided in the hospitality lounge for participants when they arrived at Madeira Drive. The event organiser had liaised with the caterer to ensure that all food packaging was compostable.

Yellow outdoor event waste containers for three waste streams (Food Waste Recycling, Mixed Recycling and Non-Recyclable Waste) were set up outside the hospitality marquee. The event organiser had also arranged more visually attractive waste containers for use inside the hospitality marquee.



The highest recycling rates of the project were achieved at this event. This was because it was a closed event, so only catering provided on the site ended up in the waste containers. A member of Brighton Paper Round staff was posted to talk to people at the recycling area, alcohol consumption was low and there was no evening element to the event. Post-event waste sorting further helped divert recyclable waste from disposal. 27% of the waste at this event was successfully recycled food waste and overall 55% of the waste at the event was recycled.

The Big Sussex Food Market took place over the Easter Bank Holiday weekend 2015. It was a free to access, non-ticketed event held on New Road in central Brighton. Producers, restaurateurs and farmers from across the county contributed hot and cold food and beverages, plus various ingredients and local produce available for customers to purchase for immediate consumption and / or to be taken away.



The yellow bins designed for the project were again utilised for 3 waste streams: general waste, mixed recycling and food waste, with separate bulk glass and card collections for the 'back of house' areas. The bins were sited in groups of 3 in the 'front of house' or public areas, as 'waste stations' to encompass all the waste streams identified.

The Brighton & Hove Food & Drink Festival is a free to enter annual festival held on the historic Hove Lawns area of the city's seafront. The festival runs for 3 days across the last weekend in May. The festival is run by a not-for-profit community interest company, with the long term aim of promoting Brighton & Hove and the surrounding area of Sussex as a world-class food tourism destination by encouraging better ways of eating and engaging with food for citizens; creating a promotional platform for food and hospitality businesses; building a connected regional supply chain; and facilitating international trade. The festival itself was attended by several thousand visitors.



A good rate of food waste recycling (14%) was achieved at the event. Challenges to recycling was the large number of caterers present, all with different types of packaging and also the availability of the event organiser in planning the recycling arrangements along with the other competing priorities of organising a large event.

The Spiegeltent and Pub operates annually on the Old Steine Pleasure Gardens as part of the Brighton Fringe Festival throughout May. It is a popular venue for acts of all kinds and the surrounding garden houses the Spiegel Pub and two local 'pop-up' food outlets. It is a busy, open access destination for Festival attendees and the general public alike.

The event waste streams were identified as: plastic cups from the bar; cardboard food containers; wooden cutlery; napkins and left over food in the front of house area; and glass and bulk cardboard in the back of house area only. In addition there was unspecified waste brought onto the site by the general public, due to the open nature of the event.

Day to day management of the bins was down to the bar staff, who were also responsible for clearing rubbish from the tables throughout the day. The event managers were charged with disseminating the information regarding the waste management system to all their members of bar staff. The waste contractor also displayed some laminated information sheets in the back of house waste area.

The bins were sited across the outside garden seating area by the event organisers, which was at its busiest in the evenings and at night. This meant that there was a low level of lighting as the natural daylight faded, creating some challenges with visibility around the bins and related signage. This resulted in changing over to fenced wheelie bins, which worked better for the site.

Right: Waste containers at the Spiegeltent venue



Results

Recycling rates of up to 55% (including 27% food waste) were achieved at one of the events (the London to Brighton Car Run). Across all of the events 41% of the 31.9 tonnes of waste collected was recycled with a total of 1.2 tonnes of food waste recycled by anaerobic digestion.

The target set for the project was that 30% of waste was recycled. A rate of 41% was achieved. A target of 5% for food waste recycling was exceeded with a 10% average achieved across all events.

A central aim of this project was to see whether food waste recycling is a feasible proposition for outdoor events in Brighton & Hove. The findings of this project show that food waste recycling is possible and can be effective if the following lessons are taken into consideration:



Higher recycling rates were achieved when:

- Events were ticketed and attendees only consumed food and drink obtained at the event.
- Caterers were using compostable packaging.
- Pre-event planning took place with the event organiser and day to day site managers. Particularly important was agreeing the design of the bins so that they suit the event, that there are the right number and they are put in the right places.
- Waste containers were designed specifically for the event. The large yellow containers worked on the beach where wheelie bins would have fallen over, but they did not work so well for bar areas where lots of people were standing close to them with drinks and could not see the signage on the front.
- Information was sent out to people booking or made available on a website to tell them about the environmental aims of the event, including recycling.



Lower recycling rates were achieved when:

- Events were not ticketed and had open admittance, which meant the organisers had no control over the food and packaging being brought into the site.
- Alcohol consumption was higher. People putting unfinished drinks into recycling containers was a major factor in reducing recycling rates through contamination.
- The event took place all or partially at night outside.
- Many caterers were involved, making asking all of them to use compostable packaging difficult.
- There was a lack of communication about the aims of the project with those responsible for running the site, particularly at site breakdown time.

Lessons Learned

- Outdoor waste containers need to be able to stand up to the wind and rain and they need to be designed to prevent access by seagulls. There is no 'one size fits all' style of waste container for all outdoor events and engagement with the event organiser is important to ensure they get the right style and number of bins to suit their particular event.
- Training of the people collecting waste and litter on site is important to ensure they know what goes in what bin and using clear / black sacks for different containers to allow sorting at the waste facility.
- There needs to be clear instruction to those breaking down the site at the end of the event to continue recycling. It was found that at the end of some events, all waste (including recycling) was treated as non-recyclable.
- Contamination increased at night and in areas where alcohol was consumed. Being able to see the signage at night is something that will need further focus in the future. It may be the case that recycling containers are removed at night or when alcohol consumption is likely to be high to prevent contamination.
- Back of house recycling is more effective than front of house.
- Closed sites where only food and drink purchased within the event are consumed and deposited in the waste containers have lower rates of contamination than open sites.
- Caterers are quite often using packaging materials that are compostable / anaerobically digestible anyway so there would be less of a step change needed if food waste recycling was to become more widely available.
- Plastic bar glasses could be included with general waste to reduce contamination.
- As many event organisers approach Cityclean about provision of waste management services on a commercial basis, there is an opportunity to promote food waste recycling through the services they offer.

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