Special events collection and recycling guide

Aim of the guide: Encourage and support waste minimisation, and collection and recycling at events.

Introduction

Many metropolitan landfill sites in South Africa are nearing full capacity, prompting a shift away from the traditional "rubbish dump" mentality due to the financial and administrative challenges it poses. Simultaneously, pressing concerns surrounding climate change and public health demand a collective rethink from various stakeholders, spanning government, academia, business, consumers, and environmentalists.

This guide seeks to provide tools for a broad spectrum of events, ranging from large sporting events, music concerts, cultural festivals, and conferences to gatherings at shopping centers, to implement waste reduction, collection, and recycling initiatives. These events often generate substantial waste destined for landfills, often due to inadequate planning and procurement. However, a shift in perspective is both essential and feasible. Leveraging the sheer scale of these gatherings presents a unique opportunity for widespread environmental awareness and fundamental recycling education. Initiatives such as paper-free conferences and guidelines for stall holders and third-party participants can significantly reduce the environmental footprint from the outset.

This guide is designed to empower financially prudent, environmentally conscious, and socially responsible planners and organizers to design strategies for comprehensive resource conservation and optimized material management at their special events.[1]

Green procurement

Green procurement is part of a pro-active pollution and waste avoidance strategy, as it gives preference to products (or related services employed) that are not harmful to the environment. It also supports the concept of local green job creation and economic development by procuring locally-manufactured goods rather than imported ones.

It is a powerful strategy to **cut down on the volumes and toxicity** of the kind of waste generated at the event that would require landfilling. Planning for key items relating to event catering and event decoration can make all the difference if goods and services procured are evaluated in accordance with the waste avoidance hierarchy and starting with the most critical questions first:

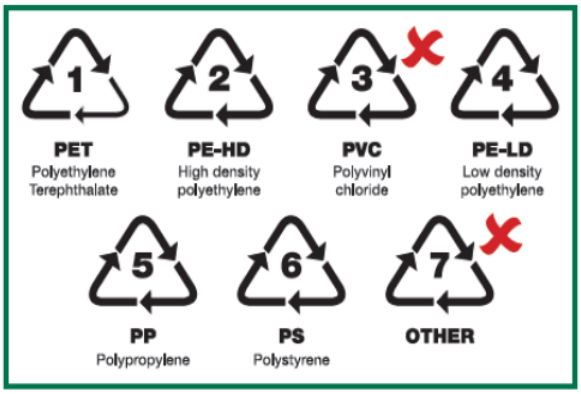
[1] More key greening strategies are also described in the City of Cape Town's *Smart Events Handbook:* https://www.capetown.gov.za/en/EnvironmentalResourceManagement/Pages/SmartLivingHandbook.aspx#smarteventshandbook

- Do we really need to have this product or service for the planned event? What are the alternative options?
- Can we lease, rather than buy the product and save costs by procuring something that is also likely to be reused?
- Do the products we want to buy for the event have recycled content?
- Does the supplier provide a take-back/buy-back service for any used equipment and key consumables (e.g. packaging for food/beverages on a full-for-empty basis in returnable systems)?
- Can we source suppliers of local goods and services with a proven sustainability performance (e.g. through an environmental performance guarantee indicated by a certified eco-label)?
- Are we buying goods (e.g. cleaning chemicals) with minimum toxic contents?
- Can the procured goods be reused for future events or by someone else?
- Can the procured goods be recycled or composted (if of organic nature)?
- Can we avoid excessively packaged goods, and buy in bulk whenever possible?

The KEY question:

How can we, through green procurement, avoid buying single use non-recyclables or disposable-only products and their packaging? These are historically key waste items generated at special events and include a wide range of food packaging items such as :

- Wet or very dirty paper or cardboard, including used tissues, paper towels, food wrappings, paper with spills, paper plates/cups, single use cutlery.
- The wrapping of sweets, chocolates or crisps packaged in shiny, multi-layered flexible packaging, clear plastic food punnets, cling wrap and polystyrene used for take-away packaging or any plastic packaging that does not show you the polymer identification triangle at all.
- Any plastic with 3 or 7 in the identification triangle (polymer identification code).



Optimising infrastructure for recycling

When planning a special event, it is important to know what **infrastructure** is needed at the venue (whether indoors in one building or outdoors or a combination of the two) to ensure you can optimally recover all the reusable and recyclable materials generated at your event safely and separate it from any remaining waste that might need disposal. This includes knowing:

- What types of bins are available or will you need
- How many bins
- What other (pre-processing) equipment such as balers and temporary storage bags will be required.

While you do not want to pay for bins and services that aren't used, you do need to ensure you have enough of the right bins, bags or cages for storing recyclables. Without enough bins for recyclables and any remaining waste, you risk contamination as people start placing waste items (e.g. food-contaminated plates) into recycling bins. This increases littering and increases clean-up costs.

To assist in determining your needs, it is important to **consult with your waste contractor** to establish what is available at the site - in particular relating to on-site sorting services and the provision of additional educational materials and bin labelling systems. Both parties should have clarity about what is expected with regards to the targets set for waste minimisation and what measures will be taken to ensure those targets are met.

A detailed **site plan** is a key tool in this regard. It will help you to identify where infrastructure for 'front of house' (public areas) and 'back of house' (areas where your materials and waste are temporarily received and possibly pre-sorted for temporary storage and subsequent collection) should be placed.

The site plan will also help to show **stallholders and other third parties** where the closest front and back of house services are located. The site plan should clearly show and take into account all the key activity areas (food courts, administrative areas, exhibition stalls etc.) where materials are consumed/used and waste streams are expected to be generated.

On your site plan, you should **mark the type of bin, and approximate placement of bins** to reflect the closest distance to where materials are generated and need to be temporarily binned. As a rule of thumb, there should be bins located at least every 12 to 15 metres apart, to ensure that there a 'natural' disposal and recycling infrastructure is being provided.

It is useful to show the **pairing structure** where relevant. This may be waste bin for organic waste paired with one for all dry mixed recyclables (twin bin system). In high traffic areas such as food courts, you may want to consider a more detailed **'recycling street'** that provides separate bins for glass, paper and plastic materials. In exhibition halls that naturally result in large volumes of used paper from marketing and brochure materials, it might be advisable to provide for a specific paper receptacle. Food preparation areas should always also provide a bin to collect any **organic** (food waste) materials, as they are readily compostable and should not be landfilled, due to their potential to generate climate changing gases such as methane.

Twin Bin:

Recycling Street with a multi bin system:

General materials and waste handling tips and separation at source

Separating materials at source should be done in such a way that it ensures minimum contamination at the back of house, and optimal consolidation of materials for transport off site to the relevant end-use recyclers.

- Before you plan to separate materials, **check with your local collection service provider** to establish what is realistic in terms of material recovery, and what is readily recyclable locally. Try to avoid introducing product streams into your event that cannot be handled locally, since it is likely to result in the material going to landfill.
- The effectiveness of your separation-at-source system in public areas significantly impacts the material recovery rate in recycling stations, reducing contamination between waste and recyclables or compostables in the back-of-house process.
- Bins should be **colour-coded and clearly labelled to avoid confusion. Recycling bins can stand out by utilising** a simple 210 litre wheelie bin and fitting them with colour-coded lids. However, if you are arranging an international event, **be aware of possible confusion**: not everyone attending your event **will know wha**t the colours mean. This means that the colour codes have to be **supported with a clear labelling system** in words and pictographs showing the acceptable recyclables as well as items that should be avoided for a particular container.

- A word of caution: **recycling streets with multi-bin systems** might look more attractive and professional, but might not be practical at all. Experience in South Africa has shown that unless those multi-bin systems **are well managed and serviced**, and supervised by a person on standby, they tend NOT to be used properly by the public. In South Africa a twin bin system generally seems to be the most logical, practical and efficient approach to achieve the key objective of avoiding contamination between wet and dirty 'waste' and dry, clean, mixed recyclables.

- **Keep it simple.** Your bin system must make sense and enable easy, and therefore **basic source separation** for the public. At the same time, it should be easy for your staff members - many of whom may be part-time workers or volunteers – to manage.
- Depending on the service level agreement with the waste service provider, on-site or off-site **sorting of the collected recyclables** could be set up. Established waste management companies often have their private sorting facilities. However, sometimes the application of basic pre-sorting and pre-treatment steps (such as baling) for large volumes on site, could go a long way to reduce handling volumes and transport costs.

Monitoring and measuring outputs

It is important to **monitor and measure** the effect of your interventions once you embark on a waste minimisation journey towards a *'Zero Waste to Landfill'* target.

Ideally, you should establish a **baseline** of a former, comparable event that was similar in its setup and size, but had none or only some of your new planned waste minimisation interventions in place. Depending on the specific situation at the past event, baseline data would include:

- Total amount of materials generated that ended up as 'waste' and required landfilling[2]
- Total cost of managing waste and materials on site
- Total cost of transporting and landfilling waste portion
- Total amount of materials recovered for reuse
- Total amount of materials recovered for recycling
- If possible: total (potential) revenue made/landfill cost saved by reusing and recycling materials

In terms of comparing the special events you organise with one another in terms of their environmental footprint for waste generation, it is advisable that you develop your own set of **key performance indicators** (KPIs) that could be expressed in terms of the baseline and in comparable unit measures such as 'per m^2' or 'per conference delegate'.

[2] This can be measured either by weight or by volume (e.g. number of skips removed). While weight measurements (via weighbridge) are far more accurate, volumetric units can normally be easier assessed and reflect more the realistic situation that landfills do not get 'heavy' but 'full' and mostly through discarded materials of high volume to weight ratios, as is typical for packaging materials

A popular KPI is the total amount of materials diverted from landfilling (in percentage of the total generation rate of both waste and materials). Therefore waste generation numbers and material diversion statistics can be expressed and reported in a comparable format e.g.:

Event X: Waste generation was: 3 kg/delegate
Event Y: Waste generation was 1.9 kg/delegate

Who collects the data? As events organiser, data collection is unlikely to be part of your core activities. The vital, detailed data required to measure and monitor success should therefore be an integral part of the **tender specifications** when you procure future event integrated waste and material management services. It is, however, strongly recommended to also maintain a basic measurement system from your side (e.g. weighing out sorted material) in order to keep a check on the accuracy of the data you receive.

Building in **financial rewards** for minimising waste and maximising materials recovery in the contract conditions for subcontractors can go a long way to motivate all parties concerned. You could expect to be charged a significant **premium** cost by your service provider for the removal of any unsorted and comingled materials that go to landfill due to lack of source separation.

Landfilled waste needs to reflect actual weights or volumes in a 'pay as you throw' tariff system. Materials recovered and sold by your service provider could in some cases yield returnable revenue to you.

Communication and marketing waste minimisation success

As public demand for 'green conferencing' and other 'green' events increases, various municipalities also provide event greening guidelines for guaranteed minimum greening steps.

A **Zero Waste Event** mindset is important for all special events – we can all make a difference. A successful special events organiser who incorporates green principles in events planning could publicise successes and market your relevant skills by **offering green special events**.

As part of your efforts to minimise waste at special events, two communication and marketing-related areas are very important:

- Clear communication before and during the event
- After the event publicity

Before and during the event, include the following in your **marketing communication strategies and activities**:

- Include some references to the fact that one of the aims of the event is to be 'green' and therefore the associated recycling measures are important.
- Add a recycling message/references to posters, pamphlets etc
- Include relevant collection and recycling information at information booths

- Explain to the delegates (e.g. through public displays, relevant **short** messages through the public address system) what the organisers want to achieve with the green measures at your event.
- Make use of readily-available and useful information from recyclers and materials streams bodies or Producer Responsibility Organisations like Petco, by contacting them for advice.

A combination of these and other communication actions will help secure buy-in and support from the event attendees, as well as the clients on behalf of whom you are arranging the event.

After the event

- Include facts about recycling successes in press releases and other reports about the event, especially to your clients and corporate partners
- Make the data available to relevant and interested stakeholders
- Develop a case study that documents all interventions and – through independent third party input – verify the results. This in itself could become a powerful addition to any future event marketing material
- Contribute to widespread public approval and recognition of the importance of collecting recyclables by contributing articles and social media content relating to successful recycling at your events

Who is Petco and how can we help you?

Petco Producer Responsibility Organisation NPC is a Producer Responsibility Organisation (PRO), incorporated in 2004, that administers Extended Producer Responsibility (EPR) schemes on behalf of its members for various identified products in the packaging sector. Petco serves as a national organisation responsible for driving recycling activities, unlocking the collection and recycling value chain, guiding product design, stimulating end-use markets for recycled material, carrying out education and awareness initiatives and building the required local recycling infrastructure and capacity.

Petco has a proven track record in the design and implementation of systems to boost and sustain the collection and recycling of recyclable materials, accompanied by supporting interventions that address the challenges of unemployment and poor awareness of the benefits of recycling and how one can get involved. Based on its experience and success, Petco is well positioned to support events with preparation and implementing their waste minimisation measures.

Petco can assist you and your event by providing recyclable material collection bags for events that can detail where you can take your recyclable materials. Petco can link you to collectors in the area that can assist with waste management at your event. You can apply for bins and the setting up of a recycling station at your event, please send an email to info@petco.co.za for more information.

Useful Contacts

Visit www.petco.co.za for a list of collection points, drop off sites and buy-back centres.

You could also contact some other industry bodies for general assistance or information about other material streams. Here are some of them:

- Institute of Waste Management — www.iwmsa.co.za
- National Recycling Forum — www.recycling.co.za
- Packaging SA — www.packagingsa.co.za
- Plastics SA — www.plasticsinfo.co.za

Contact Petco

Call toll free: 011 615 8875 (JHB)/ 021 794 6300 (CPT)
Email: info@petco.co.za
Website: http://www.petco.co.za
Facebook: Petco.Official
X: Petco.Official
Instagram: petco.official
YouTube: Petco.Official
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