ZERO WASTE EVENTS

Practical advice

For all those involved in events, including event organisers and managers, suppliers of products/services, and waste contractors. Aimed at events of any size, nature and location, this guide offers top tips for staging successful events that generate zero waste to landfill.
Introduction

Zero waste events: a 2020 vision

A zero waste to landfill event industry by 2020, where we make the most efficient use of resources by minimising demand on primary sources and maximise the re-use, recycling and recovery of all event materials instead of treating them as waste.

5 March 2013

Effective event management is vital for the success of any event, no matter what the size, nature or location. It includes consideration of a whole range of issues: legislative requirements, health and safety, permits and licences, site preparation and planning, traffic management, staffing, marketing and promotion, as well as waste management – the focus of this guide. All have to be carefully considered – the better the upfront planning, the better the event runs.

How you use materials and equipment and what you do with it at the end of your event can be directly linked to your bottom line and profits. Long gone are the days when you could have a new exhibition stand for each event you attended or just throw all your packaging, food waste and “stuff” you no longer need into the nearest bin. Today the cost of raw materials is rising, company profits are being squeezed and the cost of waste disposal to landfill is increasing.

In addition to a gate fee, the cost of sending waste to landfill is £72 per tonne in the UK (2013)*

* A general guide to landfill tax. HMRC 2012

Savvy event organisers, suppliers, venues and waste management companies are discovering new ways to reduce, re-use and recycle. Some are even creating income streams or, at the very least, reducing upfront or landfill costs. This was clearly highlighted in the work undertaken to stage the Olympic and Paralympic Games in 2012 (Games), the first ‘zero waste to landfill Games’.

To achieve, or even work towards, a zero waste to landfill event, careful planning is needed right from the beginning and for each stage of the event process: pre-event, in-event and post-event.

This may sound onerous and possibly difficult – but it does not need to be. This guide aims to take each stage of an event and offer simple actions that can go at least part of the way to achieving success. This is a journey, and should be taken step by step. Increasing effectiveness and reducing waste outputs will ultimately result in smaller overall waste management costs.

ISO20121 is a Sustainability Management Standard specifically for the events sector. Other Environmental Management Standards include ISO 14001 and BS 8555
Understanding waste

There are many opportunities to make cost savings when managing waste from an event, perhaps to even generate income. It is important to remember that what is waste from one activity can often be used as a vital resource for another.

Waste is a very visible part of any event and how to manage it should be a fundamental part of early planning. It is only by knowing from the start what is likely to end up as waste that you can then make plans to reduce, re-use, recycle or recover it (a waste management plan).

Key material streams that result in waste at end of event:

- Food & beverage waste and compostable packaging
- Packaging and dry recyclables
- Staging (including building works & temporary structures)
- Dressing (including furniture and fixtures)

Waste hierarchy:

Most favoured option

- Avoidance/Prevention
- Preparing for re-use
- Recycling
- Other recovery

Least favoured option

- Disposal

Consider if you really need it, or could you do the same thing another way; could you hire rather than buy; what would extend the lifetime of a product?

- Clean, repair or refurbish component parts or whole items so that they can be used again.

- Turning waste into a new material or product of the same or alternative use.

- Producing energy from waste e.g. incineration with energy recovery or Anaerobic Digestion.

- What is left over.
Understanding waste cont.

Know your waste

It is vital that you understand the types of waste likely to be generated at your event. Even if this is the first event you have organised, look at similar events and what they generate.

- **WHAT** waste is likely to be created? WHAT volume will be produced? Does it fit into one of the four key material streams? Could it be avoided altogether?
- **WHY** should you care? E.g. cost savings, potential income, corporate social responsibility, legal obligations.
- **WHO** will create waste? E.g. in-house staff, external contractors, audience.
- **WHERE** will it be created, onsite or offsite?
- **WHEN** will it be created pre-/in-/post-event?
- **HOW** will it be managed? HOW can I reduce it? E.g. re-use, recycle, recover, landfill.

Manage your waste

Once you know your waste, you will need to work with partners and suppliers to develop a waste management plan, stating aims and objectives and what can realistically be achieved through your collective action.

**Clearly state:**

- **WHAT** is likely to be generated;
- **WHY** you are taking this action and what it will achieve;
- **WHO** is responsible for the management, monitoring and reporting of each type of waste, e.g. in-house staff, external contractors;
- **WHERE** it is likely to be generated; WHERE it will go when removed from site;
- **WHEN** it will be generated. WHEN it will be removed from site;
- **HOW** you know you have been successful – measuring against objectives; and
- **WHOM** you will report to.

It is only by planning and learning from what works, then adapting and changing, that success can be achieved over time.

Measuring your waste

Most waste is measured in tonnes and key performance indicators should be agreed with your waste contractor prior to the start of the event. The four key areas you should measure are:

- compostable materials;
- re-used materials;
- recycled materials; and
- general waste.

WRAP’s free Event Resource Management Plan [RMP] tool can help you better understand the implications of waste. By using this tool, you are also helping to generate a body of anonymous evidence from which further research and best practice advice can be drawn.
Delivering a zero waste to landfill event

The remainder of this document looks at each stage of the events delivery process. This diagram highlights how pre-event planning can prevent waste, and how waste can be managed during the in- and post-event stages.
Pre-event: getting ready

Getting it right at this stage will mean minimum intervention during in-event

The pre-event stage is the most important when preparing for any event as it provides the foundation research and planning on which the whole event is based. Identifying likely waste materials and volumes should form a fundamental part of that planning. Putting systems in place, getting staff and volunteers trained and prepared, and predicting customer behaviour throughout the event will make managing waste in-event much easier.

The pre-event stage of any event breaks neatly into three sub sections: initiation, planning and implementation. It is largely concerned with ensuring that only essential resources are used in the most creative way – preventing waste from being generated in the first place.

Top pre-event tips for key material streams

- Know your waste (see page 4) and how you are going to measure it.
- Choose your venue and suppliers carefully – ask to see their environmental policies and waste management procedures.
- Involve your supply chain.
- Develop contract clauses that embed your waste targets.
- Communicate your waste aims to staff, partners, contractors and visitors.
- Use appropriate online promotional activities as much as possible and encourage audiences to reduce their impact.
- Include comprehensive training for staff and suppliers.
- Think creatively and be flexible – try new solutions to old problems and plan for variations.

“Don’t try to do too much at once ... make improvements one step at a time so you can focus your efforts and take your audience and suppliers with you.”

Edinburgh Mela
Initiation – start with a core team and think creatively:

- clarify overall aims and objectives of the event, e.g. music festival for 20,000 people, road cycle race, community fun day;
- define what waste success looks like within your event, e.g. separated food waste, re-use of all staging materials;
- prioritise goals to achieve waste success;
- know your legal responsibilities;
- identify barriers to success, e.g. logistics, physical location, weather;
- outline who needs to be informed and what they need to know, create working partnerships with key contractor(s), local authority, suppliers;
- identify potential suppliers; and
- ensure that you procure sustainably by using companies with clear environmental and sustainability policies.

Planning – pulling it all together:

- know your waste (see page 4);
- create a timeline, budget and quality reporting procedures while developing contracts and agreements. Be clear and concise and include waste prevention, management and reporting instructions;
- include incentives in contracts where possible such as revenue sharing or clauses for under-performance or non-compliance;
- develop a communications plan for waste using simple, consistent, motivational messaging with a clear call to action;
- develop clear briefings (and training) for staff, contractors and volunteers; and
- regularly communicate with partners and staff.

Implementation – making it happen:

- synchronise individual event components/activities;
- ensure contracts contain appropriate specifications and clauses stating who is responsible for what, with agreed targets;
- train staff and volunteers, give clear messages alongside job specific training; and
- talk to clients, sponsors and funders to ensure consistency with their corporate social responsibility planning, and encourage them to reinforce waste messaging across staff at the event.
Pre-event food and beverage waste tips

**Pre-event**

- Get the communications messaging right – making it inspiring and motivational with a clear call to action.
- Talk to contractors and suppliers early so they know what to expect.
- Be consistent across front of house and back of house in terms of colours, images, labelling, etc.
- Use pictures and diagrams to overcome language barriers on signage and bins.
- Ensure there is sufficient storage space for waste.
- Ensure contractors managing their own waste are compliant with your stated aims and objectives.
- Ensure sufficient, well labelled waste disposal facilities are available where they will be needed.
- Provide training to all staff, suppliers, contractors and volunteers on what goes in which bin.
- Consider identifying local or community groups who are licensed to collect and treat food waste.
- Minimise use of individually wrapped portions e.g. milk, sugar, ketchup and sauces.
- Where possible ask delegates to pre-select meals, reducing over catering.
- Consider compostable packaging as a contractual requirement if it can improve recycling rates for food and non-food streams.

**Getting it right at this stage will mean minimum intervention during the event**
Pre-event: Containers & packaging tips

- Ensure sufficient, well labelled waste disposal facilities are available where they will be needed.
- Provide training to all staff, suppliers, contractors and volunteers on what goes in which bin.
- Be consistent across front of house and back of house in terms of colours, images, labelling, etc.
- Avoid individually wrapped portions – use jugs for milk or water, put sugar in bowls, etc.
- Provide free water taps where possible to encourage re-use of bottles.
- Consider pictures and diagrams on signage and bins to overcome language barriers.
- Ensure packaging and bins are clearly marked with how to recycle/compost.
- Promote waste goals e.g. through art installation during the event.
- Avoid “giveaways” and encourage keepsakes instead.
- Avoid use of delegate packs – email content after the event or use memory sticks instead of handouts.
- Get the communications messaging right – make it inspiring and motivational with a clear call to action.

www.recyclenow.com

Getting it right at this stage will mean minimum intervention during the event.
Pre-event  Staging and Dressing tips

**Staging**
- Consider leasing/hire/buy-back options
- Prepare suitable segregated disposal areas
- Understand where waste will arise and how contractors will manage it
- Identify markets for re-use
- Work closely with builders, architects, etc. to design and manage out the generation of waste and improve recyclability
- Work closely with contractors to encourage innovative technology that reduces waste, e.g. at breakdown
- Segregate construction waste – it’s cheaper than mixed waste disposal
- Create an asset log

**Dressing**
- Work closely with builders, architects, etc. to design and manage out the generation of waste and improve recyclability
- Consider leasing/hire/buy-back options
- Identify markets for re-use of materials
- Investigate buy-back options for relevant functions
- Require the use of recycled/re-used components in specifications where possible
- Check recycling options with suppliers and consider material choice carefully to avoid having to dispose to landfill at end of life
- Design out the generation of waste and design in recyclability
- Identify markets for re-use

Getting it right at this stage will mean minimum intervention during the event
Edinburgh Mela:
Sustainably celebrating South Asian arts and culture

The Edinburgh Mela is the annual three day festival of world music, dance fashion, food and fun. In 2012 it decided to begin to monitor its waste and introduce some initial measures to reduce waste from over 27,000 visitors.

<table>
<thead>
<tr>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>generated</td>
<td>generated</td>
</tr>
<tr>
<td>9.7 tonnes of waste</td>
<td>6.16 tonnes of waste</td>
</tr>
<tr>
<td>a <strong>36%</strong> reduction</td>
<td></td>
</tr>
</tbody>
</table>

**How?**
Recycling and composting, including separating waste streams front and back of house.

**However**
High volumes of polystyrene catering packaging resulted in high levels of contamination in all waste streams.

**2013 and beyond, continuing to improve**
Edinburgh Mela has committed to:
- continue using WRAP’s **events RMP tool** to measure and quantify;
- use WRAP’s **Recycling on the Go** information to communicate more effectively to the audience and suppliers;
- increase the number of recycling facilities on site;
- ensure compliance with Scotland (Waste) Regulations by 1 January 2014 by working in advance with suppliers to explain not only how but also why this is important;
- impose a ban on polystyrene food containers and non biodegradable plastics across the festival, offering a discount to traders in 2013 to offset any additional costs they might incur from the change; and
- attract sponsorship to help fund the packaging initiative.

For full details of the Edinburgh Mela case study, visit [www.zerowasteevents.org.uk](http://www.zerowasteevents.org.uk)

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Find out how the **events RMP tool** could help your organisation improve waste management.

**Introduction**  |  **Understanding waste**  |  **Pre-event**  |  **Edinburgh Mela case study**  |  **In-event**  |  **Olympic snapshot**  |  **Post-event**  |  **Moving forward**  |  **Further reading and useful contacts**
In-event: show time
Be flexible and adjust if necessary

We all know that feeling – the moment the event STARTS. This might be when the first contractor arrives on site to set up, when the first camper arrives at a festival, when the first stallholder arrives for a summer fête or when the first athlete arrives at a sports tournament. This is the time when all that pre-event activity comes into its own - if you got it right the event will be a huge success with limited intervention.

In-event activity includes ALL activity on site in order to set up and deliver the event. At this stage waste needs to be managed, controlled, stored and removed from site in a legally compliant way. The amount created will depend on the nature and duration of your event, the audience and your location – no two events are ever the same.

Your waste management plan defines what you are going to do and how you are going to do it – this could be as simple as bins for commonly recycled items, or more complex arrangements for waste segregation. However, in order to demonstrate compliance, whatever has been set up needs to be MONITORED: are there enough bins, are they in the right place and being emptied frequently, is waste being placed in the correct bin, could simple changes make it more effective?

Now is not the time to make major changes unless something is going very wrong. Major mistakes can be costly in terms of both time and money – a key incentive to getting the planning right in the pre-event stage.

Continuous communication is vital to success. You will need to consider the types of information you want to communicate and to whom. Once the event kicks off you can effectively brief:

- Staff
- Contractors
- Volunteers
- Sponsors
- Performers/speakers
- Visitors/audience/delegates

Be flexible with what you are doing and adjust if necessary.

Monitor waste HOTSPOTS such as within or near the catering outlets or at entrances where waste is most likely to be produced – be prepared to fine-tune if there is a problem.

In-event top tips for key material streams

- Be out and about and make sure each aspect of your waste management plan is working as intended.
- Be flexible and ready to make changes if necessary.
- Nominate someone to champion and communicate the recycling and waste elements during the event.
- Communicate – get feedback from suppliers and contractors and ask/tell them what is and isn’t working.
In-event: Food and beverage waste tips

- Check bins for contamination and take necessary corrective action – communicate this back to staff and suppliers.
- Regularly communicate with ALL suppliers, contractors, staff and volunteers.
- Ensure appropriate waste storage until end of day/event.
- Be prepared to adapt your approach if necessary.
- Ensure clearly labelled bins are in key locations and likely “hotspots” e.g.
  - Near food outlets
  - Entrances (ensure staff know what to do with the contents of plastic bottles if liquids are not allowed on site)
  - Exits
  - Key places for customers e.g. toilet blocks, mobile phone recharging points.
- Ensure compliance with all legal regulations.

Be flexible and adjust if necessary.
In-event: Containers and packaging, staging and Dressing tips

- Ensure clearly labelled bins are in all localities and especially "hotspots", e.g. near food outlets, entrances, especially if key materials are not accepted on-site, e.g. glass bottles/liquids, exits, key points along the customer journey.
- Regularly communicate with appropriate stakeholders.
- Make a feature of resource collection e.g. reclamation station or incentivise re-use.
- Promote waste goals e.g. through art installation during the event.
- Monitor for contamination in bins and take necessary corrective action.
- Be consistent across front-of-house and back-of-house in terms of colours, images, labelling, etc.
- Be flexible and adjust if necessary.

Staging
- Maintain and repair before replacing.
- Minimal activity.

Dressing
- Be flexible and adjust if necessary.
**Olympic snapshot:**

2012 Olympic and Paralympic Games achieve zero waste to landfill*

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-use</td>
<td>Athletic equipment was donated to UK athletics; portable basketball floor went to Great Britain Basketball, tennis balls went to Battersea Dogs Home; and timber from staging was salvaged.</td>
</tr>
<tr>
<td>Recycling</td>
<td>Food and drink packaging was clearly labelled to help consumers know which bins to use; and Coca Cola bottles were recycled into new bottles within weeks of being discarded.</td>
</tr>
<tr>
<td>Composting</td>
<td>Major food suppliers, such as McDonald's, were required to use compostable packaging where appropriate; and manure from equestrian events was used by local horticultural associations.</td>
</tr>
<tr>
<td>Energy Recovery</td>
<td>Items unable to be re-used, recycled or composted were sent to energy recovery, including contaminated plastics, shrink wrap (back of house), crisp packets, individual milk jugs, napkins, sugar, salt and pepper sachets, etc.</td>
</tr>
<tr>
<td>Communication</td>
<td>Clear signage on front of house and back of house waste containers matched that on food packaging, and call to action signage was located around the sites.</td>
</tr>
</tbody>
</table>

*London 2012 Post Games Sustainability Report – A legacy of change, London Organising Committee of the Olympic Games and Paralympic Games, December 2012*
There are three elements to the closure stage of any event that should take place:

1. Breakdown/take down;
2. Evaluation; and

Invariably, take down is much quicker than build up – and this can create problems for effective waste management. Each event will have different requirements from this stage depending on the location and complexity of the event set up, and venue requirements for clearing the site. Limited access to a venue can create an additional challenge especially if turnaround is fast; it is not always easy to manage waste segregation on site. This needs to be a key consideration addressed in all contracts, including with traders, exhibitors and caterers, and it may be that items need to be removed for off site sorting and processing.

Criteria for evaluation and measurement will have been defined at the pre-event stage in order to be written into contracts. Have you achieved what you set out to? Have your contractors performed well? What more could you have done? What lessons can be learned for the next event? Use WRAP’s events RMP tool to measure this.

Communication to key stakeholders, staff, suppliers and sponsors is fundamental to winning their continued support, goodwill and potentially future funding. This should include not only successes but also areas where there is room to improve, and plans to make those improvements.

Post event can feel quite flat for the event organiser – the adrenalin rush associated with setting up and hosting/managing has gone. Now is the time to review what happened, how it worked and what you might do differently another time. It is important to have a debrief session with as many of the people involved as possible. Not only does this give you the opportunity to say a huge thank you, but also gives all parties the opportunity to say how it felt from their perspective – useful feedback when planning other events.

**Post-event top tips for key material streams:**
- Manage removal of waste materials.
- Obtain waste data from suppliers and waste contractors as per their contract.
- Host a debrief meeting with all parties.
- Review what worked and what didn’t.
- Extract lessons to be learned for next event.
- Celebrate SUCCESS.

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London 2012 Games generated **0.83kg** of waste per person per day
Post-event: Tips

<table>
<thead>
<tr>
<th>Food and beverage waste/compostable packaging</th>
<th>Packaging &amp; dry recyclables</th>
<th>Staging</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure sufficient, well labelled waste disposal facilities are available where they will be needed</td>
<td>Limited waste is generated at this stage, mainly from contractors and breakdown staff, but it is important to avoid cross-contamination with other waste streams</td>
<td>Return hired/leased items and consider auctioning off memorabilia where appropriate</td>
</tr>
<tr>
<td>Limit the amount of waste generated by implementing efficient waste management practices</td>
<td>Ensure there is appropriate waste storage space if required</td>
<td>Ensure items listed for re-use are kept in good condition and are stored appropriately and signed out before leaving site within pre-determined timescales</td>
</tr>
<tr>
<td>Ensure contractors managing their own waste are compliant with stated aims and objectives</td>
<td>Gather defined data, analyse and report</td>
<td>Monitor contractual arrangements for removal of materials – who is responsible?</td>
</tr>
</tbody>
</table>

Monitor, evaluate and learn
Moving forward

Ultimately it is possible to stage events of all sizes and types and in any location, while achieving zero waste to landfill. This was evidenced by the Olympic and Paralympic Games 2012.

The industry admits that it still has a fair distance to travel on this journey to realise the zero waste to landfill vision. However, it does not have to be a difficult or onerous task. There are best practice guides, useful tools and experts ready to help – some of them free of charge. It is important to consider waste at the very beginning of your planning process, and to be more creative about reducing and re-using it after your event has finished.

It is only through careful planning, implementation, monitoring, reviewing and reporting that lessons can be learned for future events – taking the next step to achieving zero waste to landfill events.

A zero waste to landfill event industry by 2020, where we make the most efficient use of resources by minimising demand on primary sources and maximise the re-use, recycling and recovery of all event materials instead of treating them as waste.

Every event has the potential to contribute towards this challenging vision by improving performance, reducing cost and achieving success.
Further reading and useful contacts

Zero waste events: achieving success (web portal)
www.zerowasteevents.org.uk

Event resource management plan (RMP) tool
www.wrap.org.uk/content/sustainable-event-management

Regulations and certification
Waste (Scotland) Regulations 2012
www.zerowastescotland.org.uk/regulations
www.resourceefficientscotland.com

BSI: www.bsigroup.co.uk

ISO 20121: www.iso20121.org

Legal responsibilities
Local authority for your area
Environment agency England and Wales: www.environment-agency.gov.uk
Scottish Environment Protection Agency: www.sepa.org.uk
Health and Safety Executive: www.hse.gov.uk

Duty of Care

Sustainable procurement
www.wrap.org.uk/content/sustainable-procurement

Scotland Resource Sector Commitment
www.zerowastescotland.org.uk/ResourceCommitment

Recycle on the Go
England: www.wrap.org.uk/content/recycle-go-england
Wales: www.wrapcymru.org.uk/content/recycle-go-wales
Scotland: www.zerowastescotland.org.uk/recycleonthego

Recycle Now
England: www.recyclenow.com
Scotland: www.recycleforscotland.com
Wales: www.wasteawarenesswales.org.uk

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