

Practice to be assessed and included in the Guidelines

**Number/code:** GOV15

**Title:** WASTE MANAGEMENT PLAN

**Guidelines section:**

<input checked="" type="checkbox"/>	Governance	<input type="checkbox"/>	Operational management
		<input type="checkbox"/>	<i>Context of the event</i>
		<input type="checkbox"/>	<i>Event</i>
		<input type="checkbox"/>	<i>Stadium management</i>
		<input type="checkbox"/>	<i>Procurement</i>
		<input type="checkbox"/>	<i>Mobility and logistics</i>
		<input type="checkbox"/>	

**Description:**

The earlier the waste management strategy is designed, the better.

London Olympics 2012 started working on a zero waste Olympics in 2007, 5 years in advance of the event. Some waste related obligations had been stated even earlier in the City candidature dossier for winning the Olympics. Early planning allowed the event organiser to set up all the necessary infrastructure to ensure proper waste management.

For instance, the first plan relating waste management, adopted in 2007 set the following targets:

- Waste objective:
  1. To optimise the reduction of waste through design, and to maximise the reuse and recycling of material arising during demolition, remediation and construction.
- Waste actions:
  1. Operate within the ODA’s waste hierarchy of eliminate, reduce, re-use, recycle, recover, dispose.
  2. At least 90%, by weight, of the material arising through the demolition works will be reused or recycled.
- Materials actions:
  1. At least 20%, by value, of construction materials will be of a reused or recycled source.
  2. Aim to achieve a level of 25% recycled aggregate, by weight, for the permanent venues and associated Olympic Park wide infrastructure.

Flagship measures included:

- Bespoke bins with coloured wheelie-bins used in all the relevant areas;
- Graphical and text messages (signage) to assist supporters in avoiding bins contamination;
- Reduce waste arising from the logistics workstream, including:
  - dematerialising packaging for commodities such as furniture;
  - hiring or leasing as much equipment as possible;

- keeping all packaging material so that goods could be repacked after the Games for their onward journey.
- Selection of a waste contractor that was capable to apply additional waste separation through manual inspection so as to reduce the impact of unsatisfactory separated collection at stadia.

The plan was revised in 2009 with the addition of new targets:

- Waste hierarchy:
  1. A six-level waste hierarchy adopted throughout the programme, in order of environmental preference: reduction, reuse, recycling and composting, new and emerging technologies to recover energy, conventional incineration with recovery of energy, and lastly landfill.
- Other guiding principles:
  1. Proximity principle: managing waste as near as possible to its place of production.
  2. The Games can act as a catalyst for new waste management infrastructure in London to move it towards being more self-sufficient.
  3. Sustainability: ensuring that the right decisions are made in respect to the broader sustainability agenda, in particular the consideration of carbon.
- Approach:
  1. Create a micro-economy of waste efficiency, putting in place the infrastructure and processes to minimise waste and to maximise reuse and recycling.
  2. Achieve a new standard in waste minimisation and resource recovery.
  3. Put in place infrastructure and processes to minimise waste and to maximise reuse and recycling.
  4. Ensure that the amount of Games waste produced will be minimised.
  5. Seek closed-loop solutions wherever appropriate and practicable.

It is evident that these kind of objectives require the active engagement of several actors: Municipality, Government, waste local operators, local waste facilities and treatment plants, the construction companies.

Welsh Rugby Union started a campaign to make the capital's stadium the UK's first certifiably sustainable stadium. . By creating an evolving relationship with suppliers, the stadium removed 71.52 tonnes of waste from landfill and a consequent reduction of 28.5 tonnes of CO2 emissions.

In FIFA 2014, in order to manage waste disposal at all stadiums and venues of the final competition, the LOC created a dedicated waste management department with waste managers in each host city. Together with the stadium authorities and the host cities, this team of 15 staff members coordinated the implementation of effective waste management in line with the National Solid Waste Policy. Together with dozens of local cooperatives across each state which organised themselves into 12 networks, one for each host city, over 800 waste collectors were recruited and trained by FIFA Partner Coca-Cola to collect and separate recyclable waste in the 12 stadiums. Cooperatives have traditionally, but informally, played a central role in the sorting and treatment of recyclable waste in Brazil. In an effort to formalise their work, improve their working conditions and use their existing capacity better, the Brazilian Government policy established incentives to integrate them in municipal waste management programmes.

The basis of the waste management programme at all venues was a two-way bin system which divided recyclable (paper, plastic cups and PET bottles, metal and glass) and non-recyclable waste (e.g. food and non-recyclable packaging).

Resource Management Plan (RMP) at the Old Trafford stadium: The online tool, developed with industry input, assists organisers to develop a waste management strategy for their event. It asks them to identify types of waste generated at the event and suppliers to select and implement actions to create resource efficiencies, which can lead to cost savings. The tool enables organisers and suppliers to identify opportunities to reuse items and reduce event waste. It provides a clear route for event organisers to communicate their waste management objectives and targets with their supply chain. It also helps event practitioners meet corporate social responsibilities by providing a portal to monitor and measure supply chain commitments, waste arisings and produce reports throughout the lifecycle of an event or group of events.

For the South Africa 2010 World's Cup, the South African Department of Environmental Affairs conduct a needs analysis for waste management support in Host Cities in 2008 and was able to assist the cities that needed help in the field of waste management by creating 730 jobs and for the waste management and therefore being able to collect 2,656 tonnes of waste during the event and redirect recyclable waste from landfills.

For UEFA EURO 2016 several waste prevention initiatives were adopted:

- Reusable cups were provided in stadiums and fan zones.
- Digital publications were produced where possible (as in the case of media guides, team manuals and team base camp catalogues, for example), saving 300,000 pages of paper.
- Renting was preferred to purchasing for equipment such as furniture, fences, containers and portable toilets.
- Unused and dismantled materials such as carpets, signage, wood and furniture were either returned to suppliers or donated to other organisations.
- Sports equipment was donated to local clubs and stadiums: massage tables, portable goals, benches, tactics boards, bibs, etc.
- The UEFA Foundation for Children redistributed thousands of small items, such as office supplies, uniforms, rain ponchos and signage.
- Bottle tops were collected in partnership with the NGO 'Bouchons d'Amour' and used to purchase wheelchairs.

### **Environmental benefits:**

Prevent and reduce waste production. Improve recycling and recovery rates.

### **Economic benefits:**

Prevent waste disposal related costs.

### **Applicability and replicability potential**

A general waste management plan for sport and football organisations and major events that includes an assessment of all the existing facilities and identifies the key actors to engage should be drafted with reasonable time.

Examples:

- 1) FIFA World Cup Russia 2018: started to plan the waste management strategy 2 years before the event;
- 2) LOCOG 2012: started to plan the waste management strategy 5 years before the event. The target was “zero waste directly to landfill”;

### **Source**

[FIFA World Cup Russia 2018](#)

[LOCOG 2012](#)

[Welsh Rugby Union](#)

[FIFA 2014](#)

[GRI Events Organizer Supplement Guide](#) (p. 26)

[Old Trafford Stadium](#)

[South Africa 2010 World's Cup](#)

[UEFA EURO 2016](#) (pag. 40 – 41)

For further general guidance:

[RMIT](#)

[Taiwan](#)