

Welcome







09:30	Registration and coffee	
10:15	Welcome and housekeeping issues	Dave Austin, Facilitator
	WRAP's opening speech	Liz Goodwin
	Lord's Cricket Ground	Russell Seymour
	McDonalds	Helen McFarlane
	Q&A	Dave Austin, Facilitator
11.15	Round table sessions x 2	
12.00	Lunch and networking	
13.00	WRAP introducing the Minister	Liz Goodwin
	Minister	Lord de Mauley
	Former LOCOG	Phil Cumming
	SITA	Marek Gordon
	Q&A	Dave Austin, Facilitator
14.05	Round table sessions x 2	
14.50	Afternoon Tea	
15.20	Plenary Session	Dave Austin, Facilitator
	The way forward	Dr Mervyn Jones
16.00	Event close	











Dr Mervyn Jones
Head of Products and Materials
WRAP







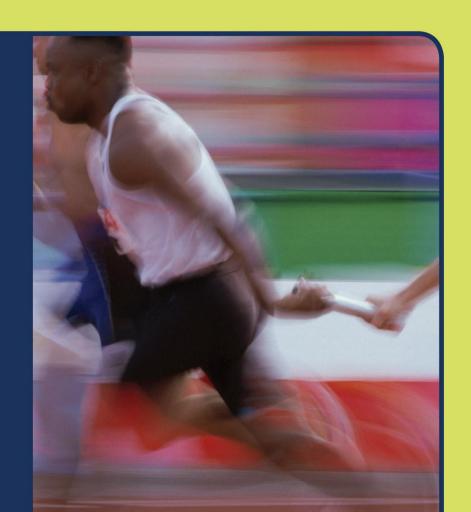
Dr Liz Goodwin
Chief Executive
WRAP







Dr Liz Goodwin Chief Executive



Zero waste events: resources

UK business consume 600 million tonnes of materials per year

- One third ends up in waste
- £18 billion benefits pa through low or no cost improvements
- £23 billion including water and energy
- £5,000 for each of 4.8 million businesses



Zero waste to landfill: a 2020 vision



Working together for a world without waste

UK EVENTS ROADMAP Zero waste events: a 2020 vision





Overview 2020 Vision

The Events Industry Policy

Business Case Key Players

Key Steps

Actions and Practical benefits Steps Tools and Resources

and Appendixi rces Waste Regulation

Zero waste events: the vision

To achieve 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.

Zero waste events: the benefits

- Increased profits
- Competitive advantage
- Adapt to future changes
- Resilience
- Improve financial performance



Zero waste events: achieving success

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Russell Seymour

Sustainability Manager

Lord's Cricket Ground







Zero Waste to Landfill at Lord's

Dr Russell Seymour Sustainability Manager, MCC 5th March 2013













LORD'S THE HOME OF CRICKET





Marylebone Cricket Club and Lord's Ground

• A member's club of 22,000 members

Established 1787

This is the third Lord's Ground – founded 1814

The most active cricket club in the world

• Guardian of the Laws of the Game

The Spirit of Cricket

An independent voice on world cricket

The Home of Cricket

700 tonnes of waste per year









Major Match Days

- A range of different matches
- 15 major match days each year
- Capacity a little under 30,000
- Up to 30 tonnes of waste each day, usually 20-25 tonnes

Waste Management at Lord's

- (SA Test 108 tonnes total)
- Spectators can bring in food and drink
- Ground open from 9am to 7pm on a Test Match day
- Residential area so restrictions on movements





What we do

Food waste currently goes with General waste for incineration with energy recovery

• Typically 25-30% recycling each year One major match dropped below 10% recycling

- No waste to directly landfill since April 2009
 - Relationship with our waste contractor





Issues

- Legislation the waste hierarchy
 - Co-operation and compliance –
 customers and back-of-house
 - Break-downs
 - Practicalities
 - Restrictions
 - Reporting
 - Costs















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Helen McFarlane
Environment Consultant
McDonald's





McDonald's - London 2012 Legacy



Environment



The 'first sustainable Games'

There were five key themes to LOCOG's sustainability plans:

1. Climate Change: minimise the carbon impact, from construction through to transport

Implications for McDonald's: showcase HFC free refrigeration, energyefficient technology, demonstrate carbon efficiency in distribution

- 2. Biodiversity: no impact on the biodiversity of the local or broader environments
- 3. Inclusion: ensure that everyone had an opportunity to work on / take part in / attend Implications for McDonald's: showcase Games Makers, Champion Crew
- **4. Healthy living:** leave a legacy of healthier living, through both a Food Vision of healthier eating, and through generating a legacy of more active living

Implications for McDonald's: highlight our sustainable sourcing policy

5. Waste: how to run a 'Zero waste games'

Implications for McDonald's: significant packaging and procedure changes

'Zero Waste' Games: Targets

 LOCOG Vision: 'To deliver a zero waste Games, demonstrate exemplary resource management practices and promote long-term behavioural change.'

- 1. Preparation: Implications for our restaurant construction:
- Use 20% (value) of construction materials from a reused/recycled source
- 90% of construction waste to be diverted from landfill
- High recovery from dismantled temporary structures post Games

Construction overview



Construction: Lessons learned

- 1. Building Structure: temporary portable frame
- 2. Air conditioning: hired units
- 3. Water use: rainwater harvesting rejected, water use controlled and minimised





Construction: Success

1. Reduce:

- Heat reclaim systems for hot water
- Dual flush WC's, time controlled taps on wash basins and waterless urinals.
- Energy efficient equipment
- 2. Re-use:
- Furniture, kitchen equipment, building frame, balcony and graphic
- 3. Recycle:
- Floor tiles, ductwork and cladding
- Recyclable materials, and sustainably sourced FSC timber





'Zero Waste' Games: Targets

LOCOG Vision: 'To deliver a zero waste Games, demonstrate exemplary resource management practices and promote long-term behavioural change.'

2. Staging the games: Implications for our operations:

- Minimise waste produced and ensure that no Games waste goes to landfill
- Ensure that 70% is reused, recycled or composted
- A simple icon- and colour- based communication scheme to help visitors deposit items for recycling
- Involvement of crew in assisting customers to put rubbish into the right bins

Packaging and Waste: Overview



Packaging and Waste: Lessons learned

 Complexities of waste separation – customers and staff

Differences in waste infrastructure

3. Bioplastics









Packaging and Waste: Success

Compostability certification

2. Packaging icons

- Bin icons and training
- Single waste stream per product





Overall Experience

Construction:

- 1. Almost all materials were reused or recycled
- 2. Careful planning in construction and deconstruction
- 3. More opportunity to trial energy saving initiatives such as heat reclaim

Waste and Packaging:

- 1. More packaging is certified as compostable
- 2. Bio plastics are being evaluated for future use
- 3. Operational insight into future waste policy direction

Advice for future events

- Start early!
- Enlist the help of specialists
- Build good relationships with event project team

- Have clarity of contacts
- Prepare for the unexpected









Q & A





Round table - 15 minutes

- 1. Ensuring compliance with regulations
- 2. All things food
- 3. Counting success
- 4. Making contracts work
- 5. Working with your waste contactor
- 6. The built environment
- 7. What a difference a venue makes
- 8. ISO201201
- 9. Communications













lunch and networking until 1pm





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Dr Liz Goodwin **Chief Executive WRAP**







Lord de Mauley
Parliamentary Under-Secretary
for Resource Management,
the Local Environment and
Environmental Science







www.zerowasteevents.org.uk







Phil Cumming
Former Corporate Sustainability Manager
LOCOG





Delivering a Zero Waste Games

Phil Cumming

Former Corporate Sustainability Manager London 2012 Organising Committee (LOCOG)



Games in numbers

- Largest peacetime logistical operation
- Lasted 77 days
- Over 100 venues
- 11 million tickets
- Over 14,500 athletes
- 27,500 media and broadcasters
- 200,000 Workforce



London 2012 Sustainability Plan

Our key strategy document

Drawn from the One Planet
 Living principles that defined
 our bid vision

First published December 2007

- Five key themes
 - Climate Change
 - Waste
 - Biodiversity
 - Inclusion
 - Healthy Living
- Legacy thread constant theme throughout project



Zero Waste Games Vision

- Minimise waste generation
- Zero waste direct to landfill at Games – 70% to be re-used, recycled or composted
- Waste minimisation principles applied to temporary overlay
 90% to be re-used and recycled (stretch target)
- Closed-loop systems
- Recovery programme of assets
- Work with partners to realise legacy potential



What do we mean by Games waste?

Temporary venues & overlay







Look and wayfinding







Operations









Food & beverage







Critical Success Factors

- ✓ Management systems
- ✓ Temporary venues and overlay
- ✓ Resource management tools and guidance
- Reprocessing options and markets
- ✓ Food catering packaging systems
- ✓ System for waste and recycling collection
- ✓ icon- and colour-based communication scheme
- ✓ Fully integrated communications package
- ✓ Approach for involving workforce including volunteers
- ✓ Transfer of knowledge



Integrating sustainability

ISO 20121 compliant management systems approach

Individual corporate and public events

Sustainability Guidelines

Conferences & seminars
Workshops
Road Shows
Cultural events
Promotional launches
Open days

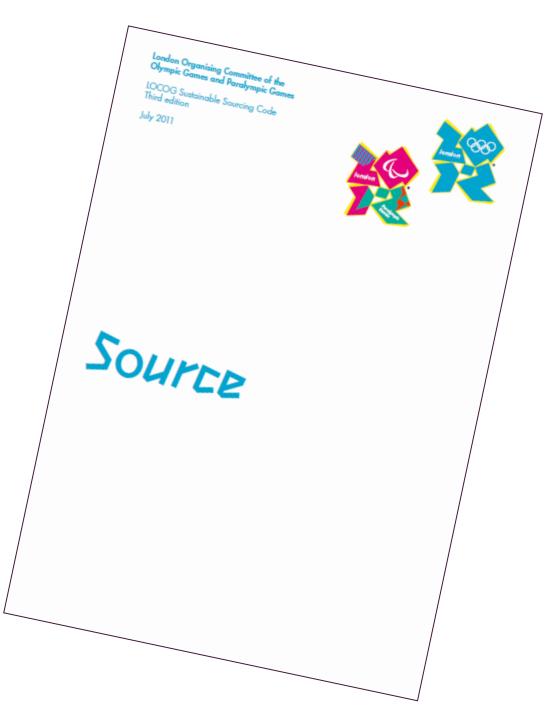
The Olympic and Paralympic Games

Full LOCOG SMS
Sustainability Plans

Test Events
Torch Relay
Opening and Closing
Ceremonies
Sports events
London 2012 Live Sites

Sourcing

- Do you need it?
- Where does it come from?
- Who made it?
- What is it made of?
- What is it wrapped in?
- What will happen to it afterwards?



Materials

- Guidelines developed in collaboration with Atkins
- Framework to manage sustainability impacts of materials selection in a temporary context
- Consider the following objectives:
 - Zero waste to landfill
 - Protect human health and the environment
 - Minimise embodied energy



Food Vision

- Food safety and hygiene
- Choice and balance
- Food sourcing and supply chain
- Environmental management
- Skills and education



Packaging specifications

- Specification developed in collaboration with WRAP, NNFCC, the packaging industry, McDonald's and Coca-Cola
- Required focus at the top of the waste hierarchy
- Criteria for recyclables and compostables
- Required caterers to source through a master supply framework
- WRAP provided specialist review of compostables



Recycling Communications

- WRAP developed bespoke icon and colour based scheme in partnership with LOCOG and Coca-Cola
- 'On pack' messaging on packaging to align with bins
- Bins and bin liners were colour coded to align with primary streams

Recycling communications strategy and plan developed in partnership

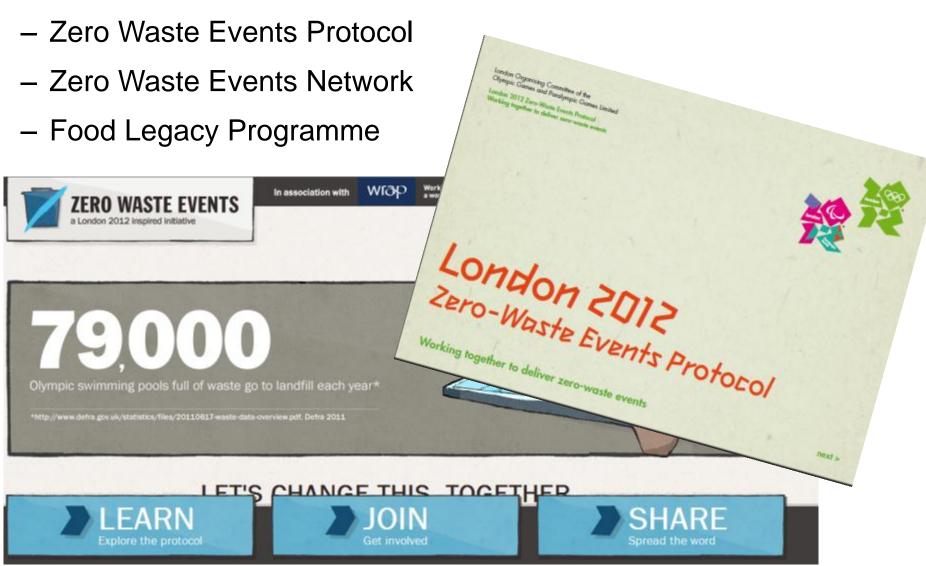
with WRAP





Other initiatives

WRAP Event Resource Management Plan tool



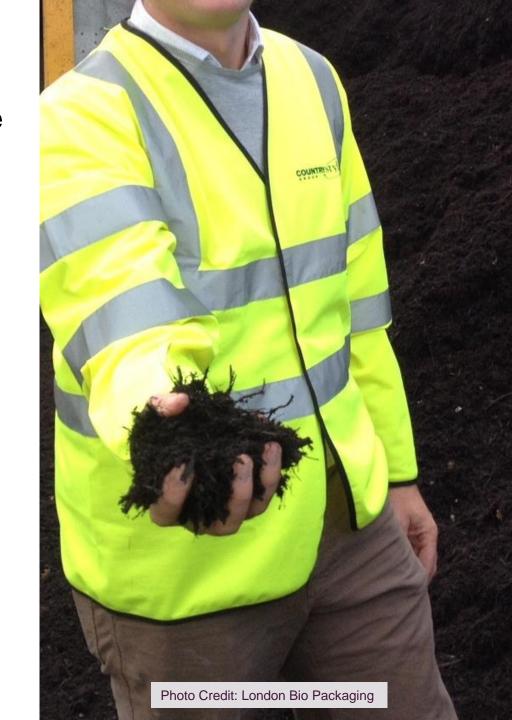
Games waste operation

- Partnership approach
- 18 months in the planning by SITA UK with LOCOG
- Exclusive use of MRF for 78 days
- Over 9,000 tonnes collected
 - 300 tonnes per day at peak of Olympic Games
 - 100 tonnes per day for Paralympic Games
- Over 100,000 vehicle miles
- 72 discrete collection locations
- Over 20 facilities used



Overall performance

- 100% event operations waste diverted from landfill
- Event operations
 - True re-use, recycling and composting performance of 62% (82% by standard calculations)
- Installation and decommissioning
 - Re-use and recycling performance in excess of 99%



Lessons learned

- Streamlined packaging / materials
- Compound management
- FOH / BOH strategies could be different
- Consistent and simple messaging
- Transition enabled changes
- Re-use can be significant
- More guidance required:
 - Reporting / claims
 - Compostables
 - Re-use



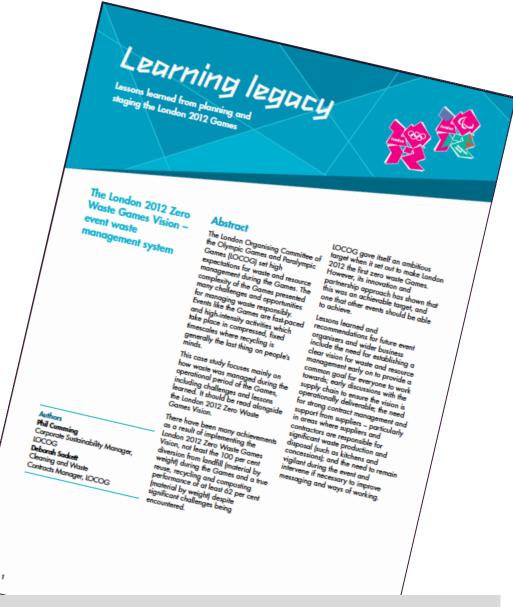
Industry takeaways

- Establish clear vision and strategy – scope your needs
- Engage supply chain early
- Establish a positive relationship with waste contractor
- Clearly define roles / responsibilities – have a robust training plan
- Keep recycling communications simple and consistent
- Be able to react
- Be honest in what is reported



Learning legacy

- Over 70 lessons learned documents
- Topics include:
 - Event waste
 - Re-use
 - Recycling communications
 - Management systems



http://learninglegacy.independent.gov.uk/index.php

Thank You



www.zerowasteevents.org.uk







Marek Gordon

Contract Director









London 2012 Games The Waste Management Experience

Marek Gordon

SITA UK Contract Director

March 2013

Content





The Zero Waste Vision One of ten LOCOG Sustainability Commitments





The Greatest Show on Earth

VENUES
37 Competition Venues
44 Non Competition
Venues

SPORT
205 Olympic Teams
170 Paralympic Teams
470 Sporting Events
30 days of Competition

PEOPLE
6,000 Employees
14,000 Athletes
25,000 Media Personnel
75,000 Volunteers
125,000 Contractors
11,000,000 Spectators



Venues outside London and/or serviced by other companies







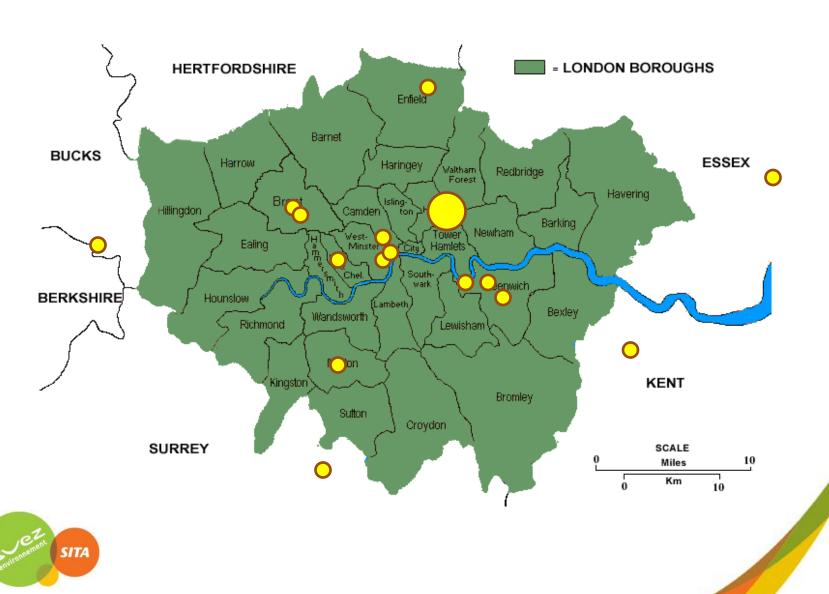








London sport venues

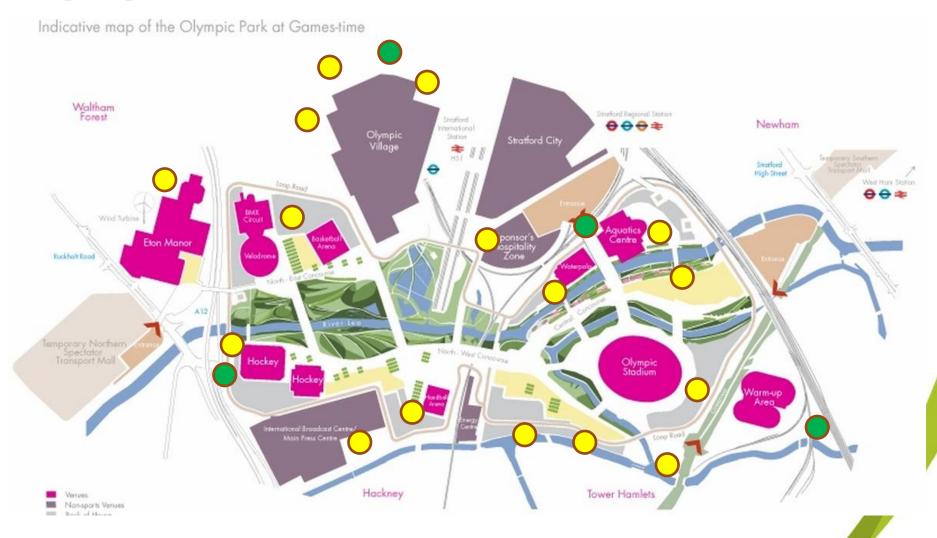


London non-sport and training venues



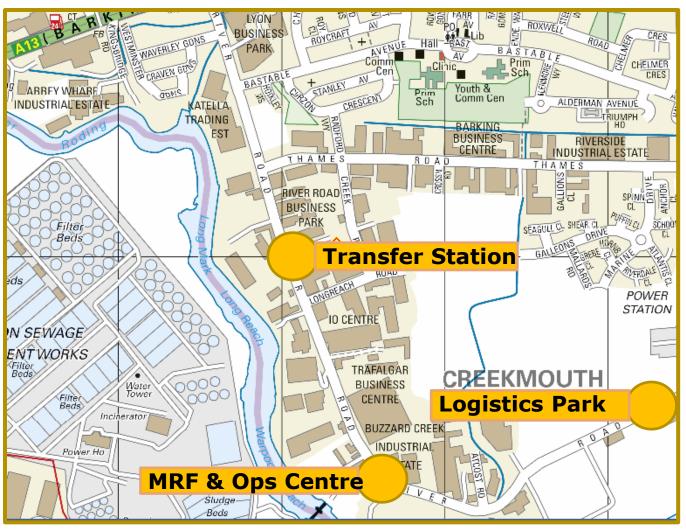
Olympic Park venues







River Road, Barking, East London



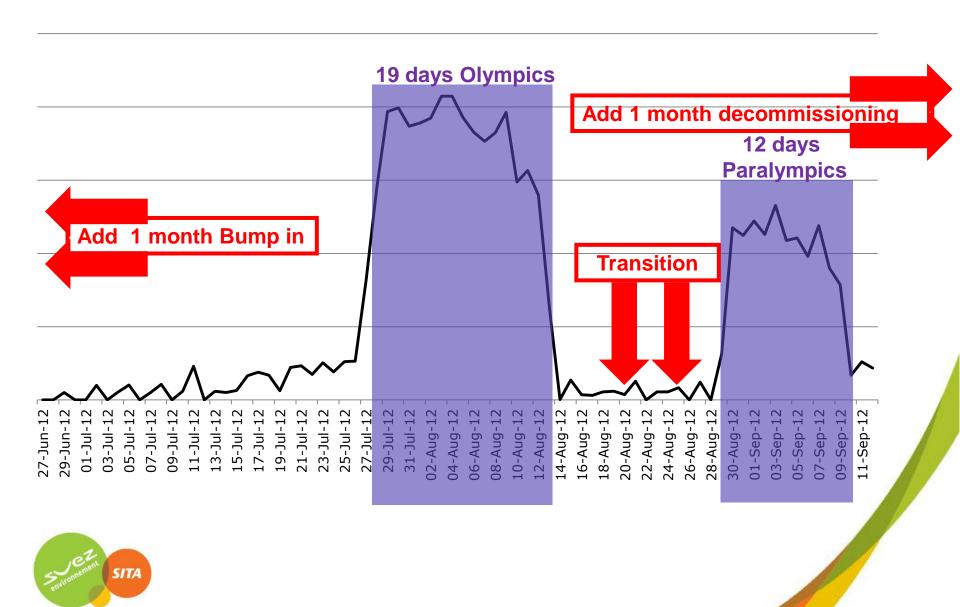


Delivery points for London Games waste

- All London recyclables to SITA Barking MRF for sorting and sale
 - Plastic bottles to ECO Plastics/Coca Cola plant in Hemswell
 - Fibres to UK mills
 - Mixed poly Cynar Avonmouth
 - All others to UK processors
- London compostables to SITA Barking Transfer Station for initial sort and transfer to Countrystyle IVC, Kent for PAS 100 composting
- London residual direct to SITA Barking MRF for sorting, final residual to EfW at Edmonton, North London (30 mins)
- Greenwich Park and Olympic Park horse waste direct to Countrystyle
- Wood to UK recycler for horse bedding use



Activity profile for Games



Key Challenges

Single "same day" mobilisation – 81 venues

Waste volume assumption – 61.5g per person per hour

Waste streaming assumption

Number of people assumption

Master Delivery Schedule Named driver on identified truck at actual time to pick up specified waste stream at each site – traffic assumption

Drawing 100 "best" drivers from SITA UK, training, local replacement, scheduling, accommodation etc

Finding UK reuse/recycling homes for wide range of unusual materials

Back-up arrangements for every eventuality

Stringent daily reporting all lifts, all collected and processed volumes

Dedicated MRF

Reaction to changed circumstances

Very small waste compounds – many people

Supply of large fleet for short term contract

Detailed tracking of processed materials to end use

NO OPPORTUNITY TO PRACTICE!



Front of House System





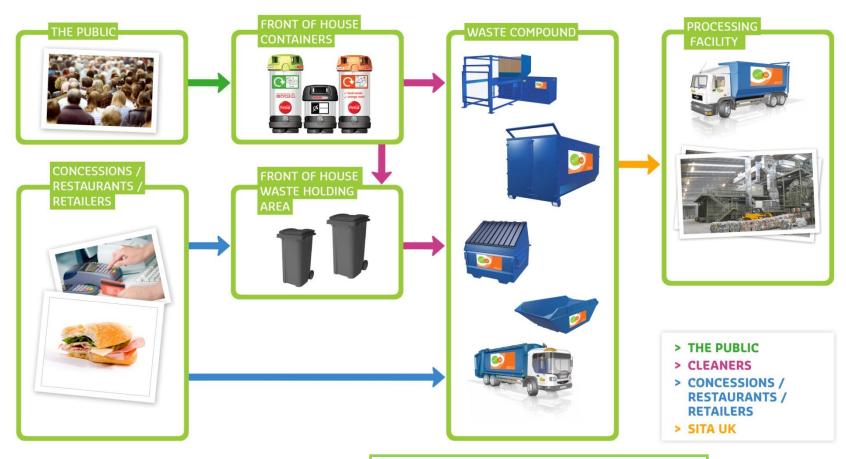
Same colour "see through" coded plastic bin liners used for all containers

Front of House System





Front of House System





Waste compound managed By Cleaning Companies

Back of House System



Same colour coded "see through" plastic bin liners used for all containers



Some unusual materials

Geo-membrane Used in foundation of Selby Trust's eco-community building

Artificial grass Used by Groundwork London in Canning Town community regeneration projects

Banners, flags etc Scrap Stores distributed for use in various projects

Carpet

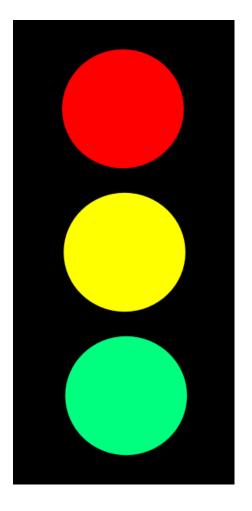
Newly re-opened Anchor Parish in Woolwich reused as part of regeneration activities

Geo-synthetic carpet Used at London Pleasure Gardens

Sand bags Sand removed from bags and reblended into building sand

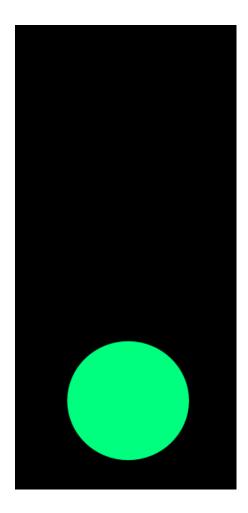


Number of health & safety incidents at venues =



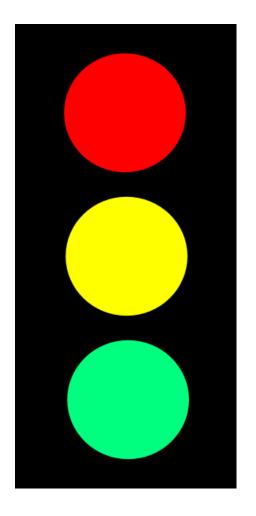


Number of health & safety incidents at venues = Zero



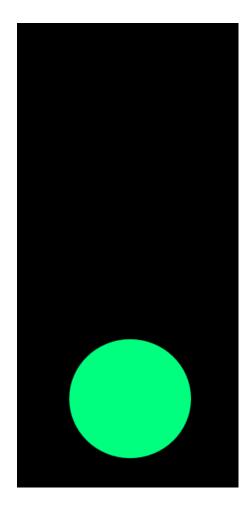


- Number of health & safety incidents at venues = Zero
- Number of environmental incidents



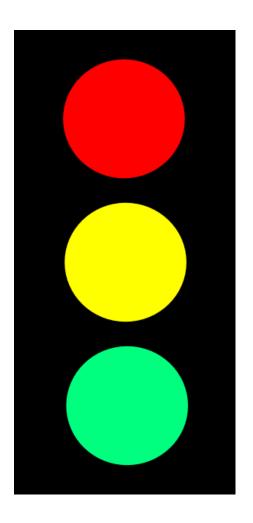


- Number of health & safety incidents at venues = Zero
- Number of environmental incidentsZero



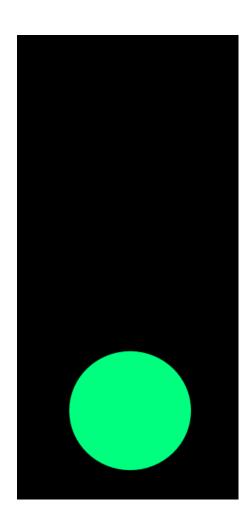


- ☐ Number of health & safety incidents at venues = Zero
- □ Number of environmental incidents= Zero
- Number of collection or other contract defaults =



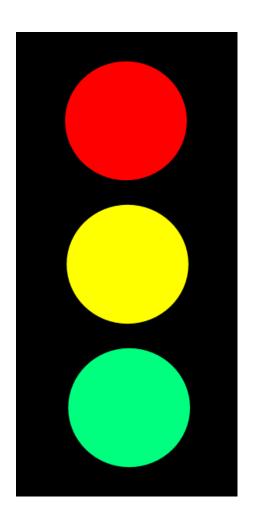


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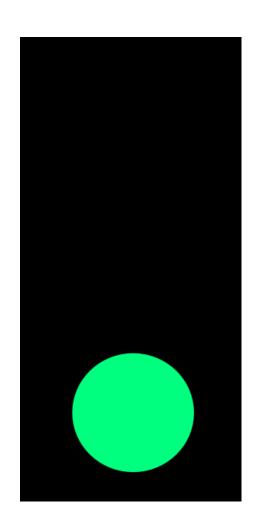


- ☐ Number of health & safety incidents at venues = Zero
- Number of environmental incidentsZero
- Number of collection or other contract defaults = Zero
- Waste to Landfill =



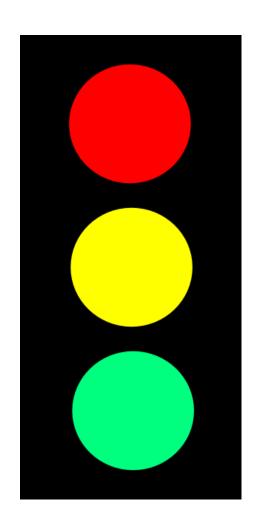


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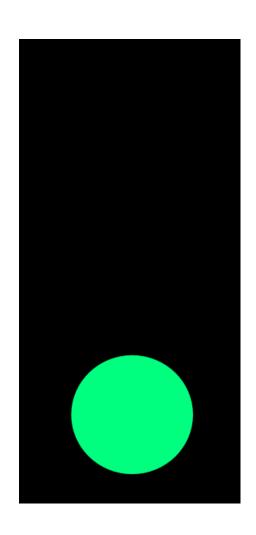


- ☐ Number of health & safety incidents at venues = Zero
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- Number of collection or other contract defaults = Zero
- Waste to Landfill = Zero
- Are we proud of that?





- ☐ Number of health & safety incidents at venues = Zero
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- Waste to Landfill = Zero
- Are we proud of that?





Collected

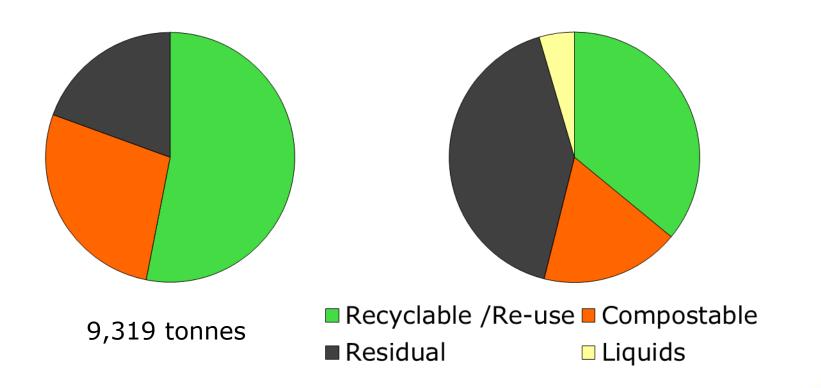
Туре	Tonnes
Mixed Recyclables	3176
Compostable	2349
Residual	1808
Soft mixed papers	730
Wood	402
Soil and stones	199
Horse waste	174
Metals mixed	111
Plastics mixed	77
Glass mixed	59
Cardboard/OCC	55
Inert waste	39

Туре	Tonnes
Polythene packaging	28
Carpet	24
Plasterboard	24
Contaminated soil	22
Mixed paper/cardboards	14
Green waste	12
Healthcare waste	5
Confidential paper	5
Sorted office paper	4
Hazardous waste	2
Fluorescent tubes	<1



Collected

Processed





Sharing Experience

- > LOCOG justifiably proud of impressive achievements
- Forward thinking and brave approach to procurement and material control
- Unique communications materials, many never attempted before
- Important data for national and international event used resource management (WRAP, Event Industry Roadmap, Sustainable Event management online tool etc)



- > The waste compound
 - ☐ Critical element of the waste system
 - ☐ Should be firmly designed at early stage
 - ☐ Should include waste experts in design
 - ☐ Must be given due space
 - ☐ For multi venue events should preferably have standard design, minimising truck and container types
 - ☐ Must be managed by waste company





- > Packaging
 - Minimising the number and range of packaging material types is desirable
 - ☐ Using "all compostable" packaging less desirable
 - Composting market for PAS100
 - Should resonate with public's domestic experience
 - Colour coding on packaging
 - Must be prominent
 - If adopted should be on all packaging
 - Needs wider adoption (to be readily recognised) or more powerful comms



- > Front of House bins and signage
 - ☐ Three colour system suitable subject to communications and use of compostable packaging issues discussed
 - ☐ Clear bins with coloured lids very effective
 - ☐ Tinted liners helpful
 - ☐ Signage must be unambiguous
 - ☐ Small adjustments by LOCOG between games generated significant improvements









- > Back of House system
 - ☐ If possible, back of house system should be separate from front of house to aid waste control
 - ☐ Early identification of contamination sources essential
 - ☐ Training and implementation of waste streaming needs higher priority even in highly pressured catering environment
 - ☐ Unused catering food and its packaging must be handled in line with the agreed system



SITA UK's experience







Zero waste events: a 2020 vision

Q & A





Zero waste events: a 2020 vision

Round table - 15 minutes

- 1. Ensuring compliance with regulations
- 2. All things food
- 3. Counting success
- 4. Making contracts work
- 5. Working with your waste contactor
- The built environment
- 7. What a difference a venue makes
- 8. ISO201201
- 9. Communications













Zero waste events: a 2020 vision afternoon tea until 3.20pm





Zero waste events: a 2020 vision Plenary

Dr Mervyn Jones
Head of Products and Materials
WRAP

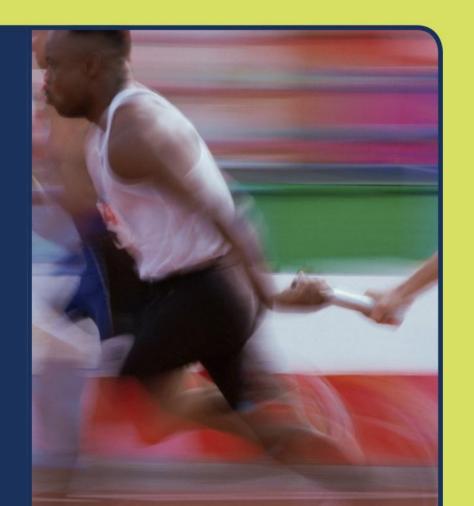






NEXT STEPS March 2013 onwards

Dr Mervyn Jones





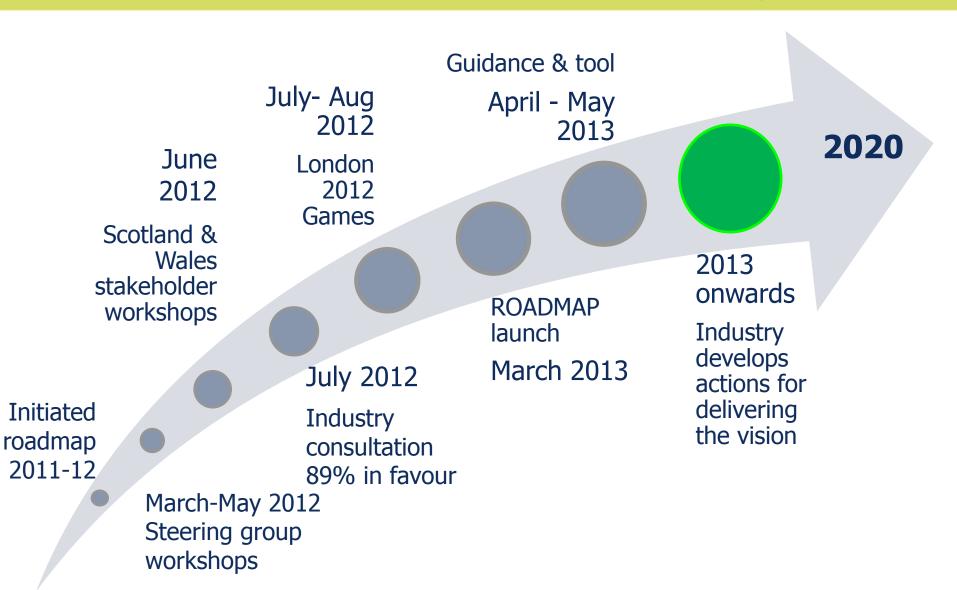
Zero waste events roadmap

To achieve 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.'



Roadmap timeline





- planning and event design
- supply chain
- consumer information
- measure and report
- reduce materials consumption
- increase re-use and recycling rates

Collective Action to reap the Benefits



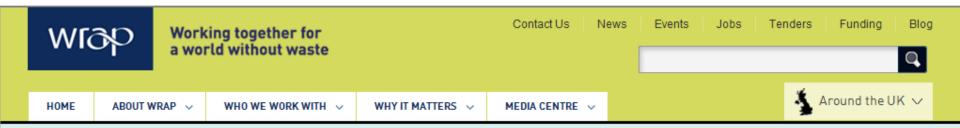
- Collective action to reap the benefits:
 - clients
 - organisers
 - venues
 - trades associations
 - sponsors
 - suppliers
 - regulators

Thank you

get more resources at:

www.zerowasteevents.org.uk

www.zerowasteevents.org.uk



Zero waste events: achieving success

Zero waste events mean using resources more efficiently, creating potential cost savings while reducing environmental impacts, and it's all part of our corporate social responsibility. It is estimated that the majority of events currently recycle only 15% of total waste – which is both economically and environmentally unsustainable.

In 2012 London hosted the first ever zero waste to landfill Olympic and Paralympic Games. Now the UK events sector has a joint vision for a zero waste to landfill industry by 2020.

The guidance and best practice collected here is designed to help your event along the journey to achieve zero waste to landfill by 2020, no matter size, type or location. Use this page to guide you through the event experience with top tips and practical advice on each stage of an event – pre-event, in-event and post-event.

More information is being added to this site all the time so please return regularly.

If you wish to sign up to receive updates, please **complete this** form.



Scroll down for the resources



Zero waste events: a 2020 vision

Thank you

Please complete your evaluation

www.zerowasteevents.org.uk



