



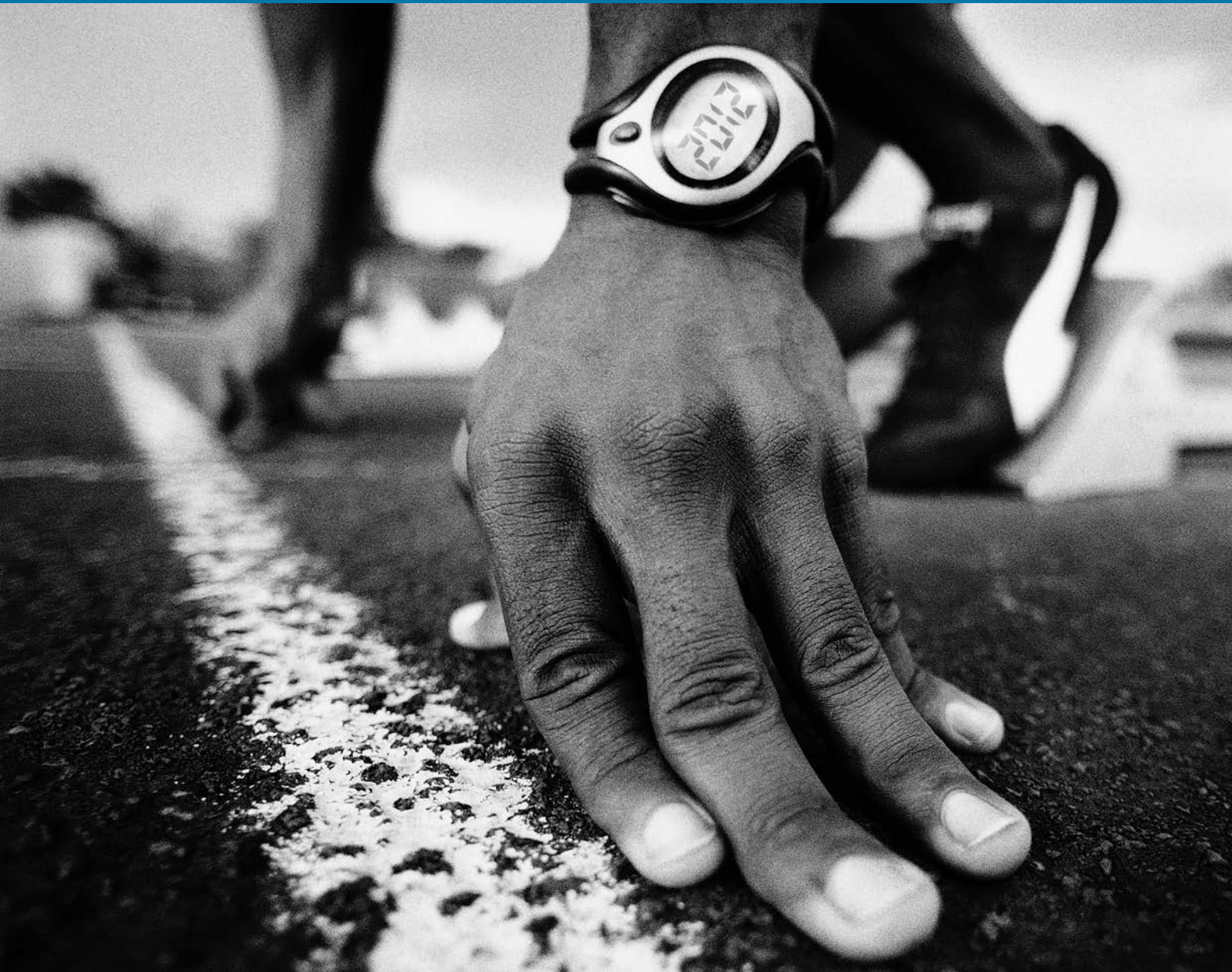
COMMISSION FOR A
SUSTAINABLE LONDON 2012

Thematic Review

In sight of the finishing line

A review of the preparations to stage a sustainable Games

February 2012



Executive summary

With the Games rapidly approaching the Commission undertook a review of the sustainability commitments that need to be delivered at or immediately around Games-time. This involved reviewing a sample of the preparations that are being made to ensure that London 2012 is on track to meet the commitments and to provide assurance over the likelihood that they will be met.

This review has focused on operational delivery at Games-time to ensure that sustainability commitments are met. It has not covered whether the Games will look and feel sustainable and how this will be communicated to spectators, volunteers and the viewing public at home. These areas will be covered in the Commission's 2011 Annual Review.

During 2011 LOCOG has gained certification to BS 8901, the British Standard specification for a sustainability management system for events and the GLA began work towards it. This represents a significant achievement for an Olympic and Paralympic Games, being the first to achieve certification to a standard of this nature. We have also seen good progress towards meeting the challenging commitment to zero Games-time waste going landfill, with at least 70 per cent to be reused, recycled or composted. The plans to deliver the food vision are developing well, with the main caterers on board and going out to the market for suppliers that can meet the requirements.

We expect LOCOG to be able to assure compliance to the Sustainable Sourcing Code. We were not able to fully verify sound assurance processes within LOCOG for the use of HFC in cooling and refrigeration, to ensure that the Sustainable Sourcing Code will be complied with. As we have not been able to assure the process in this area, this has given concerns around the application of LOCOG's assurance processes for other aspects of the Sustainable Sourcing Code such as timber and PVC. We have made or re-iterated recommendations on these areas and will follow up on them in our annual review.

Some of the biggest challenges remain in areas where there is a need for multiple organisations to be involved in meeting the commitments and where there is not a traditional contractor–client relationship. Back in our 2008 Annual Review we recommended that “All users of the London 2012 Brand should be required to demonstrate how they will contribute to the London 2012 Sustainability Plan and relevant objectives”. This recommendation continues to apply now we are in the run up to the Games and more partners continue to come to the table to run events, provide services and deliver commitments. A key new recommendation in this area is how the GLA's Live Site operator, Live Nation, will meet London 2012 sustainability requirements. Areas where we believe there needs to be greater coordination are around the changing roles and responsibilities on the Olympic Park over the next 12 months and in the areas immediately around venues and race routes.

In April 2011 it was confirmed that LOCOG would not meet its target to have 20 per cent renewable electricity at Games-time. We accepted that it was not practicable to achieve this and that they would meet at least the equivalent carbon reduction through a reduction in energy use. We know that LOCOG are working on several measures to reduce energy use but have not yet seen the detailed calculations that will enable us to give assurance that they will meet or exceed the target. We have therefore re-iterated our 2010 Annual Review recommendation “That LOCOG

calculates the carbon that would have been saved through the renewable energy target and demonstrates how this carbon will be saved through reducing Games time energy use.”

During the summer of 2011 the Commission attended all the first cluster of test events in the London Prepares series to observe how LOCOG was managing sustainability at these events and to help inform the commission’s Games-time assurance role. We are pleased to report that overall there was a good level of performance on site with key issues being identified and managed. We have also had positive feedback from statutory agencies, such as the Environment Agency and Natural England with regard to the areas they are responsible for regulating. The Commission also welcomes the elements of provision to ensure that venues are accessible, for example the well sited accessible viewing areas at the mountain bike circuit at Hadleigh Farm.

There have been some incidents and issues arising from the test events, as this is clearly one of the purposes of them to identify problems prior to the Games. We have fed our findings into LOCOG’s learning from the test events to help the issues be addressed. Two crucial areas that we have fed back to LOCOG and they are addressing are the relative capacity of some contractors to manage sustainability issues in temporary venue construction and deconstruction and the challenges in getting good waste segregation.

Recommendations

Recommendation 1

That the GLA clarify, monitor and report on where its Live Site operator will and will not meet relevant London 2012 sustainability requirements, including on waste, catering, the use of generators and the implementation of BS 8901, continuing to press them to meet commitments where possible and setting out the rationale for where they will not be complying with them.

Recommendation 2

That LOCOG clarify, monitor and report on where it will and will not be using alternatives to HFC, setting out the rationale for any cases where it will be using HFC. In addition, where HFC-based systems are used that they are well maintained and managed to prevent any possible leakage of HFC.

Recommendation 3

That LOCOG and the ODA urgently complete a matrix of responsibilities for the sustainability management in period up to and including the point at which the Olympic Park is handed over fully to the OPLC and that they ensure sufficient resourcing is in place for each area.

Recommendation 4

That LOCOG produce an energy management and conservation plan demonstrating how it will reduce carbon emissions by at least the amount that would have been avoided through the renewable energy target, in sufficient time for its recommendations to be implemented.

Recommendation 5

That LOCOG ensures that there is sufficient capacity to address accessibility issues during the construction and deconstruction of temporary venues and overlay and at Games-time.

Recommendation 6

That LOCOG demonstrate that there are sufficient resources and expertise within all contractors and that their Sustainability Team has the capacity to manage all sustainability issues during the construction and deconstruction of temporary venues and overlay and at Games-time.

Recommendation 7

That LOCOG test the full Games-time waste and catering solutions during at least one event prior to the Games.

Recommendation 8

That the LOCOG City Operations team continue its work in ensuring appropriate plans for street cleansing, waste and recycling, accessibility, security and health and safety in the last mile around venues where it is the lead coordinator and that it supports TfL and Local Authorities where these organisations take the lead.

Previous recommendations that are re-iterated in this report

2008 Annual Review Recommendation 3

All users of the London 2012 Brand should be required to demonstrate how they will contribute to the London 2012 Sustainability Plan and relevant objectives.

2008 Annual Review Recommendation 11

The London 2012 Sustainability Group should ensure that substances with high Global Warming Potential such as HFC are eliminated where possible.

2010 Annual Review Recommendation 7

That LOCOG calculates the carbon that would have been saved through the renewable energy target and demonstrates how this carbon will be saved through reducing Games time energy use.

2010 Review of Waste and Resource Management Recommendation 9

That City Operations teams, both in London and other locations around the country, set objectives for waste management that are consistent with those adopted by London 2012 and that particular emphasis be made on ensuring non LOCOG-controlled external venues fully meet these standards.

2010 Review of Biodiversity Recommendation 7

That LOCOG contract management processes include effective assurance at point of delivery to ensure that all timber and timber products adhere to their sustainable sourcing requirements.

2011 Review of Inclusion and Healthy Living Recommendation 4

That LOCOG publish its Overlay Access File in a manner accessible for other event organisers to use and to enable it to be updated as new solutions are found to accessibility issues.

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Introduction

1. Aim of the review

- 1.1 With the Games just one year away and preparation well advanced in many areas, it was considered appropriate for the Commission to undertake a review during the summer of 2011 into how London 2012 was gearing up to deliver on the Games-time sustainability commitments. This review focused on the relevant work of LOCOG, ODA transport, TfL and London City Operations (GLA).
- 1.2 The rationale for undertaking a review of Sustainable Games Preparation was:
- Previous reviews of food, waste, transport and our annual reviews identified a number of areas where we said we would follow up as well as areas where work was in progress and we need to ensure that the progress has been continued.
 - Many commitments will only be delivered at Games-time. It is necessary to review the progress made so we can provide assurance over the extent to which they are on track for delivery.
- 1.3 The review set the following aims:
- To review the progress in preparing to deliver on Games-time sustainability commitments, aims and objectives.
 - To provide assurance over the extent to which the relevant bodies are on track for delivery.
 - To identify successes and good practice where there could be a learning legacy.
 - To make recommendations where appropriate.

2. Scope and structure of the review

- 2.1 For the purposes of this review, the Key Stakeholders are the Olympic Delivery Authority (ODA), the London Organising Committee of the Olympic and Paralympic Games (LOCOG), the Greater London Authority (GLA) Group, the Government Olympic Executive (GOE) and the Olympic Park Legacy Company (OPLC).
- 2.2 This review and report has been structured to provide an overall picture of key areas of commitments and delivery, followed by a more detailed summary of the position within relevant functional areas in the relevant organisations. The prime focus has been with LOCOG, as the body delivering the Games themselves, with the responsibilities of other organisations picked up in the relevant parts of the report.
- 2.3 The review has focused on the mechanics of delivery that will be needed at Games-time to ensure that sustainability commitments are met. It has not included the question of whether the Games will look and feel sustainable and how all of this will be communicated to spectators, volunteers and the viewing public at home. These areas will be covered as part of our 2011 Annual Review, which will be published in May 2012.

2.4 The review includes a broad sample of operational areas across the relevant Key Stakeholders, covering the following areas:

- Venues
- Technology
- Spectator transport
- Official transport
- Catering
- Waste
- Logistics
- Asset management
- Accessibility
- Energy
- Ceremonies
- Workforce
- Volunteers

2.5 There are of course other operational areas and it has not been possible to include all operational aspects of the Games in this report. Areas that are not covered in this report include:

- Villages
- Accommodation
- Arrivals and Departures
- Look, Wayfinding and Signage
- Press Operations
- Retail Operations
- Cleaning
- Broadcasting
- Prestige / Sponsor hospitality
- Event Services

2.6 Relevant aspects of these areas will be covered by our 2011 Annual Review, as outlined in paragraph 2.3. Other areas will be picked up through the Commission's ongoing assurance.

3. Games-time sustainability commitments

Table 1 – Major Games-time commitments from the London 2012 Sustainability Plan

Carbon

- Supply 20 per cent of Olympic Park electricity requirements at Games time from new local renewable energy sources.
- Use a low emission vehicle fleet:
 - Optimise composition of Games Family vehicle fleet.
 - The passenger car fleet procured for the Games will have an average emission standard under 120g CO₂/km.
 - Average CO₂ emission standards will be set for other vehicle categories (for example, logistics vehicles, buses and coaches).
- Minimise impacts of Games-time transport and travel planning:
 - 'Green travel plans' for ticketed spectators and workforce.
 - Cycling and walking will be encouraged via the Active Travel Programme.
 - Visitors from long distance in the UK and the near continent will be encouraged to travel by rail rather than air or car.
- Low/zero-carbon Olympic and Paralympic flames:
 - London 2012 Sustainability Partner EDF is committed to providing low-carbon fuel solutions for the flames of the Olympic torch and the cauldron and is currently reviewing the technical feasibility of different options.

Waste

- To stage a zero waste Games, London 2012 will (within 'closed-venues'):
 - Ensure that the amount of Games waste produced will be minimised.
 - Ensure that no waste arising during the 77-day Games period will be sent directly to landfill.
 - Treat all waste as a potential resource and ensure that at least 70 per cent of Games-time waste will be reused, recycled or composted.
 - Take reasonable endeavours to reuse or recycle at least 90 per cent, by weight, of the material arising from the installation and deconstruction of its temporary venues and overlay (stretch target).
 - Seek closed-loop solutions wherever appropriate and practicable (that is, seek optimal recycling solutions, rather than downcycling).
 - Ensure that Resource Management Plans are prepared by suppliers to manage areas of significant waste generation to support the achievement of objectives and targets (for example, catering, overlay, and so on).
- Develop an approach to minimise risks and maximise the reuse and recycling of materials and products arising from the Games overlay, both during the transition from Olympic to Paralympic staging and post-Games breakdown.
- Work with the packaging industry, the National Non-Food Crop Centre and WRAP to identify deliverable solutions for food and catering packaging systems.
- Develop an integrated Games Waste and Resource Management Plan – to be trialled during the Test Events phase in summer 2011 and finalised by the end of that year.
- Review recycling labelling options already in existence, any plans to develop such schemes and the experiences of those using and delivering these labels.
- Incorporate sustainability considerations into the material aspects of post-Games dissolution strategies.

Biodiversity

- Key areas for action on biodiversity are:
 - Minimising and mitigating the impact of construction activity where possible on existing species and habitats in the run up to 2012.
 - Protecting sensitive habitats and species at other competition sites, through development of venue environment management plans.
 - Promoting awareness of the value of biodiversity and its links to sport and healthy living.
- Opportunities to promote awareness of biodiversity and access to nature will be developed for all Games competition venues. Potential measures may include:
 - Venue layout and presentation to integrate with the natural landscape.
 - Natural materials and features to be used as part of the 'look of the Games'.
 - Home-grown and native plants and flowers to be used for landscaping and ceremonies.
 - Maps and other information to be provided on local features of ecological and heritage interest, including accessibility and cycle and walking routes.

Inclusion

- LOCOG has set the following target zones for the workforce by 2012:
 - BAME 18-29 per cent
 - Disabled people 3-6 per cent
 - Women 46-54 per cent
 - LGBT 7-10 per cent
 - Under 30 20-30 per cent
 - Over 50 10-15 per cent
- LOCOG has developed a high-quality access standard to ensure standards of accessible infrastructure and overlay. This also includes a Games mobility service appropriate for an accessible and inclusive Games.

Healthy Living

- Games-time air quality management will focus on the following initiatives:
 - London Best Practice Guidance – Control of Dust and Emissions from Construction and Demolition (November 2006) will be applied at all venues for the erection and dismantling of temporary structures and overlay.
 - Ticketed spectators and workforce will travel to and from venues by public transport (except for those disabled people to whom public transport is inaccessible), or by walking and cycling – see Transport section p73.
 - All competition venues will be operated as ‘low emissions venues’ at Games-time.
 - All passenger vehicles (category M1) accredited to enter Games venues will need to meet at least Euro V emission standards with a stretch target of Euro VI.
 - All light goods vehicles accredited to enter Games venues will need to meet at least Euro V emission standards.
 - Larger vehicles, including lorries, buses and coaches will be covered by the requirements of the London-wide Low Emissions Zone in force at the time (expected to be Euro IV as of January 2012).
 - The low emissions venue concept will extend to minimising emissions from fixed infrastructure, including temporary generators and cooling and refrigeration systems.
- LOCOG will work with its fuel partner BP and automotive partner BMW and main logistics partner UPS to seek low emission solutions for Games-time vehicle operations.
- Sustainability is integral to the delivery of the Games logistics operations. In partnership with UPS, the official logistics and express delivery supporter, LOCOG will undertake the following initiatives:
 - Development of a Logistics Sustainability Plan, including specifications for emission standards for commercial vehicles to provide an integrated approach to venue logistics services, warehousing services and the transportation network of vans and lorries that links them.
 - Operation of the Games Logistics and Command Centre to manage all Games transportation and logistical operations.

- Our [London 2012] food vision for the Games is:
 - To enhance everyone's experience of the Games by celebrating the great diversity and quality of British food and drink, and delivering it at affordable prices.
 - To leave a strong, sustainable legacy for London and the UK by nurturing commercial and educational partnerships.

4. Overall preparations and cross cutting activities

- 4.1 There is a clear desire within LOCOG to remain true to the aim to stage “truly sustainable Games”. The need to take pragmatic decisions in some areas is becoming more apparent as the Games draw nearer but there remains the desire across the organisation to show how each section can play a part in making the Games more sustainable.
- 4.2 Table 1 shows the key commitments made in the London 2012 Sustainability Plan, grouped by the five themes of sustainability that this plan uses. The Commission recommended as part of our 2009 Annual Review¹ that LOCOG set a suite of targets to reflect the emerging development of their priority sustainability strategies. We are pleased to report that they have done this. In April 2011 London 2012 published their first full sustainability report “A blueprint for change”². This adds more detail on how London 2012 will be meeting their commitments from the London 2012 Sustainability Plan and sets out their progress towards them. This is then supported by a number of internal sustainability strategies for individual functional areas within LOCOG. These are covered in the relevant sections below.
- 4.3 The details of the key London 2012 Sustainability commitments are covered in the individual sections of this report. Taken as a whole we are seeing good progress across the commitments with two high profile exceptions where they have not been achieved.
- 4.4 Examples of the good progress that is being made include:
- The ongoing implementation of the food vision, with LOCOG’s main caterers signing up to the standards.
 - LOCOG’s automotive partner BMW finalising their plans to ensure their fleet meets the 120gCO₂/km target.
 - LOCOG and ODA Transport both being certified to BS 8901, the British Standard specification for a sustainability management system for events.
- 4.5 The first high profile exception is with the commitment to have at least 20 per cent of Games-time electricity coming from new local renewable sources. This is covered further in paragraph 5.12. The second exception is with the commitment by LOCOG and their Sustainability Partner EDF to providing a low-carbon fuel solution for the Olympic torch. This is covered further in paragraph 14.5.

1 http://www.cslondon.org/downloads/CSL_Annual_Review_2009-full-digital.pdf

2 <http://www.london2012.com/documents/sustainability/london-2012-sustainability-report-a-blueprint-for-change.pdf>

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- 4.6 LOCOG and ODA Transport both chose to implement BS 8901 as it is a more appropriate management system for the nature of their organisations than ISO 14001, which was implemented by the ODA's delivery partner. LOCOG has been involved with the ongoing development of BS 8901, with the 2009 version being awarded the London 2012 Inspire Mark and a new international standard, ISO 20121, is in development.
- 4.7 The application of BS 8901 has formed the cornerstone of LOCOG's approach to managing sustainability within the organisation and has brought in another level of sustainability auditing, with an accredited body auditing LOCOG to certify that they meet the standard. The Commission commends LOCOG on achieving certification to the standard, particularly given the complex and wide-ranging nature of the organisation.
- 4.8 During the summer of 2011 LOCOG ran its first series of test events, known as the London Prepares series. These form an important part of the testing and readiness programme within LOCOG that is running a series of different tests, trials and other programmes and initiatives to ensure that they are fully prepared for the Games. The Commission attended all of the test events in the first phase to help inform our assurance programme, both now and to help understand our role at Games-time.



The equestrian test event in Greenwich Park. Photo: Jonathan Turner

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- 4.9 It is important to recognise that in many areas, including those with significant sustainability implications, LOCOG does not have a traditional client-contractor relationship but instead a relationship with various commercial partners where in many cases their partners will be delivering aspects of the Games a part of their sponsorship agreement.
- 4.10 This presents risks around the ability of LOCOG to ensure that the commercial partner meets all of LOCOG's sustainability requirements as it does not have the same financial leverage of a traditional client, with the money flowing in the other direction. However, the brand recognition rights are clearly very valuable, hence the sponsorship deals, giving a different leverage for LOCOG to utilise. LOCOG has taken steps to address the risks by ensuring that all their commercial partners sign up to their Sustainable Sourcing Code as part of their sponsorship agreement, in the same way that any contractor would be required to adhere to the Code.
- 4.11 A further challenge comes when the sponsor is a Worldwide Partner of the Games (sometimes referred to as a TOP sponsor), having been signed up by the International Olympic Committee (IOC). Here the contractual agreement is first and foremost with the IOC, not LOCOG. LOCOG does have a contractual agreement with the Worldwide Partners, which includes compliance with all LOCOG policies. However, we are aware that in some aspects ensuring that all of the requirements of the Sustainable Sourcing Code are adhered to by all Worldwide Partners is proving a challenge for LOCOG. An example of this is covered in the technology section of this report (section 7) where some Worldwide Partners are currently resisting the use of Sedex for their London 2012 supply chain, as they believe that their supply chain management processes are sufficient and are questioning why LOCOG would need to know their factory locations and what audits have taken place.
- 4.12 In our 2008 Annual Review we recommended that ***“All users of the London 2012 Brand should be required to demonstrate how they will contribute to the London 2012 Sustainability Plan and relevant objectives”***.
- 4.13 As this applies to all who are responsible for delivering any part of London 2012, this would apply to any goods or services supplied by a commercial partner to LOCOG. The Commission therefore expects LOCOG to apply this recommendation by continuing to expect all their commercial partners, licensees and contractors to meet all their sustainability requirements and by declaring areas of potential non-compliance and their corrective action. In addition, we believe that the IOC should strengthen the sustainability element of its agreements with its Worldwide Partners.
- 4.14 Whilst the majority of the sustainability implications of staging the Games are managed by LOCOG and their commercial partners, there are other organisations whose Games-time activities will have significant sustainability implications. The GLA will be managing the London City Operations programme which aims *“To provide an inspirational citywide experience for everyone participating in the Games in London, to safeguard the smooth running of London in Games time, and to maximise the opportunities for legacy from this work”*. In previous reports the Commission has been critical of the level of preparedness

within the GLA City Operations team with regard to the sustainability implications of the areas they are managing. During 2011 we are pleased to say that there has been significant progress made in this area, with dedicated resource being brought in from April 2011 to work through the issues and aim to secure certification to BS 8901. Detailed aspects of City Operations role and sustainability implications can be found in section 12 and relevant sections of this report, however one important aspect of this links to the points in paragraphs 4.9 to 4.13.

- 4.15 City Operations will be managing Live Sites during the Olympic and Paralympic Games. These are sites where the public can go to watch the Games on big screens in enclosed ticketed venues, including one at Hyde Park that will take up to 50,000 people and another in Victoria Park, Tower Hamlets, that will also have an emphasis on sports participation with a range of ‘have a go’ sessions. These venues will be operated and managed by a commercial partner at no cost to the public purse and the tickets will also be free. The tender for the Live Sites was issued in October 2010 with a memorandum of understanding being signed with Live Nation in February 2011 and the contract being executed in October 2011. The running costs of the sites will be paid for by Live Nation holding concerts at the sites in the run up to the Games, which they will charge for, and through money raised via catering concessions in the sites.
- 4.16 We acknowledge that there may be some areas where implementing the same sustainability standards as London 2012 would prove challenging, given that they are operating within a different financial position and that the memorandum of understanding was signed in February 2011, with BS 8901 implementation getting fully underway shortly after. However, the Commission believes that the same principle that we outline in paragraph 4.13 applies. When the sites are being run as part of London 2012 we would expect Live Nation to demonstrate how they are contributing to the London 2012 Sustainability Plan and relevant objectives and we expect GLA City Operations to continue to press them to meet relevant London 2012 sustainability requirements. The detail of what the Commission expect to be delivered in these areas is set out in the relevant sections of this report. We recognise that they will not always be able to achieve exactly the same standard as LOCOG but we still expect to see appropriate commitments on waste, catering, the use of generators and the implementation of BS 8901. To address this we expect the GLA to clarify and report on where Live Nation will and will not meet London 2012 sustainability commitments and set out the rationale for any areas where they will not comply.

Recommendation 1

That the GLA clarify, monitor and report on where its Live Site operator will and will not meet relevant London 2012 sustainability requirements, including on waste, catering, the use of generators and the implementation of BS 8901, continuing to press them to meet commitments where possible and setting out the rationale for where they will not be complying with them.

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- 4.17 The use of HFC has been an issue that has come up throughout the London 2012 programme. Our annual reviews have covered how this was brought up by the Commission with regard to the cooling system of the Aquatic Centre, resulting in this changing from HFC-based cooling to an ammonia-based system. This change, along with the site cooling network, coming from the Combined Heating, Cooling and Power plant, means that over 90 per cent of cooling on the Olympic Park in legacy is due to come from HFC-free sources. HFC use is also being addressed where possible in Games-time cooling and refrigeration. LOCOG covers HFC use in their Sustainable Sourcing Code³, which lists them as restricted substances and also directs suppliers to the London 2012 policy on the use of HFC⁴. Coca Cola has committed to 100 per cent of their refrigerated vending machines and coolers being HFC free, as part of a move to all their new units being HFC free by 2015⁵.
- 4.18 There will however, be some HFC cooling systems in operation on the Park. The ODA has constructed some temporary venues on the park that require cooling, for example, the basketball and water polo arenas. The International Broadcast Centre also requires cooling at Games-time which it may well not require in legacy, depending on the eventual use of the centre. As a result they are cooled by temporary HFC based systems. LOCOG will also have some cooling in operation at their temporary venues. It has set a target of a 70 per cent reduction in non-essential HVAC – challenging the original baseline assumptions for venues and back of house – which will make an important contribution to minimising HFC-based cooling systems. However, some systems will be required and LOCOG has so far been unable to hire HFC-free cooling systems, with companies only being willing to sell units. LOCOG also require a range of refrigeration systems for their catering and are finding that HFC-free devices are only available for some of their requirements and not for others. During the course of this review LOCOG was unable to clearly demonstrate the anticipated level of systems that will use HFC. We are surprised that the hire market has not responded to the challenge to supply HFC-free HVAC and refrigeration systems given the extent of LOCOG's requirements and the time they have had to work together to develop appropriate solutions. LOCOG has been in discussions with the industry about alternative low Global Warming Potential (GWP) replacements for refrigerant gases but these are not expected to be available to test in the UK until later 2012.
- 4.19 In our 2008 Annual Review⁶ we recommended that ***“The London 2012 Sustainability Group should ensure that substances with high Global Warming Potential such as HFC are eliminated where possible”***. This in part led to the adoption of the London 2012 policy on the use of HFC. Given that LOCOG will be procuring a range of equipment that is likely to use HFCs, it needs to ensure that its systems and processes for managing and controlling the application of the London 2012 policy on the use of HFC are robustly

3 <http://www.london2012.com/documents/locog-publications/sustainable-sourcing-code.pdf>

4 <http://www.london2012.com/documents/imported/use-of-hfc-policy.pdf>

5 http://www.thecoca-colacompany.com/dynamic/press_center/2009/12/coca-cola-commits-to-climate-friendly-refrigeration-through-engagement-with-greenpeace-investments-i.html

6 http://www.cslondon.org/downloads/2008_Annual_Review.pdf

applied, that alternatives are used wherever possible and where systems are used that they are well maintained and managed to prevent any possible leakage of HFC. Where HFC-based systems are used the rationale for this needs to be clearly set out.

Recommendation 2

That LOCOG clarify, monitor and report on where it will and will not be using alternatives to HFC, setting out the rationale for any cases where it will be using HFC. In addition, where HFC-based systems are used that they are well maintained and managed to prevent any possible leakage of HFC.

5. Venues and Infrastructure

- 5.1 The construction of permanent venues, permanent upgrades to venues and major temporary venues such as the Basketball arena have been completed by the ODA and are covered by previous Commission reviews, such as our 2010 Annual Review⁷ where we reported that *“The ODA has done an exemplary job of sustainable construction and has set new standards that the industry would be well advised to follow”*. This review has focussed on the temporary venues that will be constructed immediately prior to the Games and removed afterwards and the temporary overlay that will be installed at permanent and borrowed venues.
- 5.2 LOCOG venues include:
- Entirely new temporary arenas in parks, such as in Greenwich Park.
 - Overlay at existing venues, such as Lords or Excel.
 - Overlay at ODA constructed venues, such as the Olympic Park and the White Water Canoe Centre.
 - Road based events, where there will be biodiversity implications for surrounding areas.
 - Supporting venues such as hotels, depots and warehouses.

Resources

- 5.3 The LOCOG Sustainability Team has four members of staff embedded in the Venues and Infrastructure Team and a secondee based in Weymouth. They ensure that the Venues and Infrastructure Sustainability strategy is implemented across all venues, working across all aspects of the venues throughout their lifecycle. This covers design, procurement, construction, operation, and deconstruction.
- 5.4 The fieldwork for this review included the Commission attending at the series of test events during the summer of 2011. This was both to see how venue-related issues were being managed and also to help inform our role at Games-time. Each main venue build contractor was required to have a dedicated sustainability manager, although the experience of these individuals and their level of seniority within the company varied considerably. Venue sustainability assurance was provided by the individuals mentioned in 5.3.

7 <http://www.cs london.org/downloads/CSL-Annual-Review-20102.pdf>

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- 5.5 For the Olympic Park there is a phased handover of responsibilities from ODA to LOCOG. The main venues have already been handed over, with the parklands and public realm following from January 2012. Some elements, such as environmental monitoring will remain in the control of the ODA Delivery Partner through the Games, with LOCOG being notified of any incidents that are under their control. The Commission has requested a matrix of responsibilities for the whole of 2012 to understand where the responsibilities lie and the level of resourcing that is in place for them. We understand that, as of October 2011, this is in development and believe that as the transfer of responsibilities is already underway it needs to be urgently completed to prevent the risk of anything falling in between areas of responsibility.

Recommendation 3

That LOCOG and the ODA urgently complete a matrix of responsibilities for the sustainability management in period up to and including the point at which the Olympic Park is handed over fully to the OPLC and that they ensure sufficient resourcing is in place for each area.

Process

- 5.6 The overarching Venues and Infrastructure sustainability aims are set out in the Venues and Infrastructure Sustainability Strategy:
- **Leave no trace:** Prevent permanent adverse impacts on the environment through design, and prevent environmental damage during installation and deconstruction.
 - **Zero waste to landfill:** Reduce waste through design and good practice, and maximise reuse and recycling of materials.
 - **Zero harm:** Operate projects free from accidents, ill health, injury and pollution incidents.
 - **Leave positive legacy:** Support lasting environmental, social and economic benefit to business and communities.
- 5.7 The strategy sets out further detail on how these requirements are to be implemented and has six priority areas, supported by a range of performance indicators. The six priority areas are:
- 1 Reduce LOCOG owned carbon emissions and minimise our carbon footprint through hiring 85 per cent of commodities.
 - 2 Reduce planned footprint of LOCOG venues by 25 per cent against March 2004 baseline.
 - 3 Reduce non-essential comfort cooling (HVAC) by 70 per cent against March 2008 baseline and maximise opportunities for natural ventilation.
 - 4 Minimise particulate matter of prime running temporary generation by 80 per cent (from a Stage 11 to 111B plant classification).
 - 5 Ensure 20 per cent of materials purchased by LOCOG, by value, will be from recycled or secondary source (stretch target).
 - 6 Reuse or recycle at least 90 per cent, by weight, of material arising from the installation and deconstruction of temporary venues and overlay (stretch target).

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- 5.8 Sustainable Design Requirements have been produced for venues and the Commission has seen examples of these for different types of venues, including some initial responses to them from Venue Managers setting out how they are being applied to the venue.
- 5.9 LOCOG has issued Sustainability Guidance for Suppliers, which is primarily aimed at Venue and Infrastructure contractors. These set out LOCOG's requirements and guidance for meeting them.

Findings

- 5.10 In our design and procurement reviews we recommended that LOCOG seek to influence the marketplace for goods and services they require where they will be leasing them. The Venues and Infrastructure team has done this in the procurement of cabins and in the innovative structure to provide a level field of play for the equestrian arena. The cabin supplier has begun a process of upgrading their cabins to make them more energy and water efficient. LOCOG is also seeking to minimise its bespoke requirements for cabins so that they can maximise the reuse potential, for example as construction site offices.
- 5.11 The use of energy in venues will be a significant contribution to LOCOG's total energy demand. Their KPI for reducing non-essential HVAC will play an important part in reducing the venue energy demand. At present LOCOG is projecting a reduction of 40 – 50 per cent. A reduction in the back of house venue footprint will also assist in energy reduction but this will be relatively minor.
- 5.12 In April 2011 LOCOG announced that it would not be able to meet its commitment to 20 per cent of the Games-time electricity demand being supplied from new local renewable energy sources. The Commission supported this decision, as it had been proven that this was not practicable. However, this was on the proviso that the equivalent carbon reduction was going to be supplied through a reduction in the overall energy demand for the Games. We have covered the need for clear calculations around the detailed carbon footprint of the Games in several previous reports, including Annual Reviews and our Carbon Review⁸, published in December 2009, where we reported that it was not clear how LOCOG was measuring its footprint or factoring it into decision-making. In our 2010 Annual Review we recommended ***“That LOCOG calculates the carbon that would have been saved through the renewable energy target and demonstrates how this carbon will be saved through reducing Games time energy use.”*** We have seen progress by LOCOG on carbon management in a number of areas but we are still awaiting comprehensive calculations to demonstrate how they will achieve the necessary reduction. Measures such as the reduction in HVAC will make an important contribution to this but without a clear plan we are as yet unable to provide assurance that this commitment will be met. With the Games now rapidly approaching LOCOG need to demonstrate how they will make carbon savings through energy reduction that will at least replace their renewable energy target.

8 http://www.cs london.org/downloads/2009_Carbon_Review.pdf

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- 5.13 LOCOG and their Partner EDF Energy have been investigating the options for real-time display of venue energy use as part of their sustainability communications. We were initially advised by EDF Energy that they would be looking to do this at all competition venues. We are now advised that they are looking to install this at a few venues – most likely just on the Olympic Park and at the Athletes Village. They will still have next day information for use in monitoring energy usage but this will not have the same communications value as real-time information systems. The Commission is disappointed that there will not be the widespread use of real-time energy monitoring and display as this could have supplemented their Games-time sustainability messaging through providing public confidence in the sustainability of the Games. LOCOG do intend to have half hourly energy usage information for all venues and key energy uses within the venues to help manage energy use. Having accurate, robust monitoring information linked to effective management is vital and is standard practice for good energy management and we would expect LOCOG to have this happening at all venues as a minimum.
- 5.14 Whilst LOCOG has developed an estimation of their expected energy use and are working on a number of initiatives to reduce energy use, such as the reduction in non-essential HVAC and initiatives with technology, there is not a comprehensive energy management and conservation plan. It is essential that a clear plan be produced that identifies the opportunities for energy reduction, sets clear targets for reducing energy use and demonstrates how this will reduce carbon emissions by at least the amount necessary to replace the carbon emissions that would have been avoided through the renewable energy target.

Recommendation 4

That LOCOG produce an energy management and conservation plan demonstrating how it will reduce carbon emissions by at least the amount that would have been avoided through the renewable energy target, in sufficient time for its recommendations to be implemented.

- 5.15 LOCOG is making progress toward the other targets outlined in paragraph 5.7, projecting to hire 87 per cent of commodities, against a target of 85 per cent, and a back of house venue footprint reduction of approximately 15 per cent, against a target of 25 per cent. These figures are subject to change as the designs are finalised and the Commission encourages LOCOG to continue to seek all opportunities to minimise their physical and their carbon footprint through these targets.
- 5.16 The Commission has yet to see reporting on the other three key indicators but we do not expect to have had information yet. With the generator emissions we are aware that LOCOG is working with its commercial partner Aggreko to seek generators that will meet this new emissions requirement. Testing is continuing but they have yet to secure filter technology that will meet the requirements and the necessary level of operational efficiency.
- 5.17 We understand that LOCOG will be using the WRAP toolkits for recycled content to meet indicator 5 when they are procuring commodities but with the majority of commodities

being hired, this has taken a lower priority so far. The waste arising from temporary venues and overlay can obviously only be measured during the construction and deconstruction of venues but the Sustainability Guidance Pack for suppliers shows what LOCOG will be expecting of contractors to seek to meet this target.

- 5.18 In the case of the International Broadcast Centre (IBC) the fit out has already begun and is being managed by the Olympic Broadcast Service (OBS), a division of the International Olympic Committee. Broadcasting was excluded from this review and will be addressed in our 2011 Annual Review. The Commission has not met with the OBS during this review and we have not requested specific information on their compliance with LOCOG sustainability policies from LOCOG. We have been advised by LOCOG that the OBS supply food to their outside broadcast staff at outside venues and some Olympic Park venues. This is covered in paragraph 8.10 and the Commission believes that the OBS should apply London 2012 food vision to their supply of food. As LOCOG do not have a direct contractual relationship with OBS they cannot contractually require them to adhere to all their policies, although they are seeking to influence them. We will be covering this and other issues relating to broadcasting in our Annual Review, where we will also be addressing the extent to which LOCOG's standards are applied to all partners in general. This will include the extent to which partners who are not contractually obliged to meet LOCOG's sustainability policies are doing so.



Aerial shot of the Olympic Park showing the Media Centre. © LOCOG.

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- 5.19 The accessibility of venues is managed by LOCOG's Accessibility Manager and design teams, using the LOCOG Overlay and Access File (LOAF). This takes Inclusive Design principle and applies them to temporary venues and overlay. In our review of Inclusion and Healthy Living we recommended ***“That LOCOG publish its Overlay Access File in a manner accessible for other event organisers to use and to enable it to be updated as new solutions are found to accessibility issues.”*** We have been advised that LOCOG will not publish the LOAF prior to the Games as it is a live document that is being updated as their plans and understanding of their overlay evolves. The Commission understands this and continues to recommend that it be published as soon as possible and immediately after the Games at the latest, so that other event organisers are able to learn from it and build upon it.
- 5.20 The venue design teams are expected to use the LOAF in their venue designs, which are reviewed by Accessibility Consultants working for Atkins, with any issues or exceptions being discussed by the Accessibility Manager. Whilst this process has been functioning so far, the Commission is concerned that this would not be manageable if there were a late flood of exceptions to review and process. This could well occur as all venues, including both front of house and back of house areas, are finalised and as many late changes are often required once construction is about to commence. A design freeze has now been put in place, so the risk of design changes should now be minimised. Late operational changes are still possible and a change control process will be in place for this. LOCOG will need to ensure that they have plans to deal with any late rush of operational changes, including having provision for bringing in increased resources if required.

Recommendation 5

That LOCOG ensures that there is sufficient capacity to address accessibility issues during the construction and deconstruction of temporary venues and overlay and at Games-time.

- 5.21 In our review of Inclusion and Healthy Living we also recommended “That LOCOG encourages existing venues that will host Olympic and Paralympic events during the London 2012 Games to implement lasting accessibility improvements.” To date the only place where this has occurred is with the construction of a permanent Changing Places toilet facility at Wembley stadium. The Commission is disappointed that there are not more permanent accessibility improvements to pre-existing venues occurring as a result of London 2012 but recognises that LOCOG cannot make a venue owner improve their venue. This also means that LOCOG will be reliant on temporary accessibility improvements to ensure that existing venues meet their standards and leaves a risk that they will be unable to make temporary improvements that would make the venue as accessible as a permanent improvement would be. LOCOG has had some success in encouraging venues to adjust their policies so that they are more accessible. Examples of this are improving provision for assistance dogs, such as the number of guide dogs that are allowed at any one time and having audio description available at all sessions. In addition, having an accessible back of house as well as front of house provides a legacy for other mega events to learn from.

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- 5.22 The Commission has covered the ticketing process through a statement published in August 2011. One area that addressed a Games-time accessibility issue was the options provided to ensure that accessibility needs were covered in the ticketing process, enabling people to set out their accessibility needs when applying for tickets. The range of different accessibility needs that people were able to set out and have taken into account place LOCOG at the forefront in this area. The seat options that were available were:
- Deaf and hearing impaired.
 - Visually impaired.
 - Easy access seat required.
 - Enhanced amenity seat required.
- 5.23 London 2012 committed to providing a Games mobility service appropriate for an accessible and inclusive Games. This is currently being procured, with the intention to provide small vehicles to transport people with mobility needs around the Olympic Park. It has always been recognised by London 2012 that there are a range of different mobility needs and the service is intended to support them. The Commission agrees with this and believes that it is important to ensure that the service can cater for as wide a range of disabilities and mobility needs as possible to ensure the Games are accessible and inclusive.
- 5.24 The Commission has used the first cluster of test events from the London Prepares series to observe how a range of issues, including those with venues and infrastructure, have been addressed in practice. We were also grateful for the opportunity to help inform our plans for our Games-time assurance role. We have found an overall good level of performance on site with key issues being identified and managed. We have also liaised with statutory agencies, such as the Environment Agency and Natural England with regard to the areas they are responsible for regulating and have had positive feedback from them. We have also been pleased to see elements of provision to ensure that venues are accessible, for example the well sited accessible viewing areas at the mountain bike circuit at Hadleigh Farm.
- 5.25 There have been some incidents and issues arising from the test events, as this is clearly one of the purposes of them to identify problems prior to the Games. We have fed our findings into LOCOG's learning from the test events to help the issues be addressed. One crucial area for Venues and Infrastructure was the relative capacity of some contractors to manage the sustainability impacts of temporary venue construction and deconstruction. Some contractors provided very experienced managers with the ability to identify issues and challenge practices within the organisation. Other contractors provided sustainability managers with less experience and with insufficient internal authority to effectively challenge practices where necessary. LOCOG has identified this issue and has raised it with the contractors involved to ensure that sufficient resources will be provided at Games-time.

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- 5.26 Reports from Vancouver suggest that last minute changes to venues, particularly as a result of broadcaster's requirements, caused problems for the environment team who found themselves under-resourced to deal with them. In addition, as the sustainability standards of London 2012 are much higher than previous Games, it will be difficult to predict the resource levels needed.
- 5.27 The level of sustainability resources within the LOCOG V+I team was of concern during the test events with the team being stretched to provide a site assurance role, whilst continuing planning for Games-time. We have discussed Games-time resourcing with LOCOG and have been informed that they will have a total of 9 people from the Sustainability Team, drawn from a team of 18, supported by 11 experienced volunteers, to manage and assure sustainability issues at venues. There will also be a nominated person within each venue team who is responsible for sustainability within the venue, as a part of their overall venue management role, although they will not be a sustainability specialist. We welcome the additional resourcing that is being put in place to manage and assure sustainability at Games-time. We have been informed by the Director of Strategy, Stakeholder Relations and Planning that this has been reviewed internally and that they are confident that sufficient resources will be in place.
- 5.28 Assessing the level of resources needed to ensure venues are sustainable and accessible and that environmental management is effective will always be a challenge. As set out in paragraph 5.20, we are concerned about the resources to address late changes that could impact on the accessibility of venues. In addition, as outlined in paragraph 5.25, the summer test events illustrated risks around the capacity of some contractors to manage and assure sustainability issues during installation and deconstruction of temporary venues and overlay, which could have a knock-on requirement for the LOCOG sustainability team to carry out a greater level of assurance. LOCOG has addressed the issue of contractor capacity for sustainability management with their contractors and now need to demonstrate that they will have sufficient resources and expertise within contractors and that their Sustainability Team has the capacity to manage all sustainability issues during the construction and deconstruction of temporary venues and overlay and at Games-time.

Recommendation 6

That LOCOG demonstrate that there are sufficient resources and expertise within all contractors and that their Sustainability Team has the capacity to manage all sustainability issues during the construction and deconstruction of temporary venues and overlay and at Games-time.

6. Materials

- 6.1 In addition to the materials needed for venues and infrastructure covered in section 5, there are other areas where LOCOG's commitments to sustainable materials will apply. One high profile area will be the materials that will form the look and feel of the Games.

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- 6.2 A common approach is being taking to the look and feel of venues and surrounding areas and the towns and cities hosting venues. This is the way these places will be dressed up and decorated to celebrate the hosting of the Games and to have a consistent Olympic and Paralympic look to them. We understand that this is the first time that there will be a common look and feel across the Games and the host city. LOCOG has appointed a single company to manage all look and feel items that will be used to dress venues and around London and the UK. These will be ordered through a catalogue, known as the look book, to enable LOCOG to manage the materials being used. Local Authorities will be able to source materials to dress their areas and will be required to do this using the same book.
- 6.3 The LOCOG Sustainable Sourcing Code and London 2012 policy on the use of PVC have been used in developing the material specifications, with PVC being avoided if possible and otherwise phthalate free PVC being required. Commodities data sheets are being developed and manufacturers required to register with Sedex, which provides a secure database for companies to store and share ethical data including self-assessment, audit reports and corrective action reports and status.
- 6.4 In their Sustainable Sourcing Code LOCOG has committed to using FSC certified timber except 'where it can be justifiably demonstrated that it is not possible to supply items from FSC certified sources then timber and timber products which are able to be verified with appropriate documentation in respect to their origin and legality are acceptable'. This is reinforced through their Sustainable Design Requirements for Temporary Venues and Overlay. Timber and timber derived products are identified during the kick off stages of procurement and monitored throughout the tendering process.
- 6.5 In our biodiversity review⁹ we recommended ***“That LOCOG contract management processes include effective assurance at point of delivery to ensure that all timber and timber products adhere to their sustainable sourcing requirements.”*** As LOCOG has required that all timber and timber products will be FSC certified or will be expected to have an equivalent chain of custody they will benefit from having a document trail to be tracked and monitored. For products this is due to be done by the logistics team where it comes through their warehouses and also through site audits. For temporary venues and overlay this is due to be tracked by the principal contractor and through site audits by LOCOG. This can be a fairly resource intensive process and in order to minimise the risk of non compliant timber being used LOCOG will need to ensure that it has appropriate procedures in place to effectively track and assure the sustainability of all timber and timber products.

7. Technology

- 7.1 There is a wide breadth of technology solutions required to successfully deliver the Olympic and Paralympic Games and these are delivered through a number of Technology Providers. There are multiple partners and suppliers delivering services for LOCOG,

9 http://www.cs london.org/downloads/CSL_Biodiversity_-Review.pdf

from a mixture of IOC Worldwide Partners (Acer, Atos, Samsung and Panasonic), LOCOG Partners (BT), LOCOG supporters (Cisco), LOCOG providers (Airwave) and other suppliers or relevant organisations (OfCom and Xerox). This makes for a very complex commercial environment to deliver sustainability solution in and one where a one size fits all approach would not work.

- 7.2 To address this, the LOCOG Technology Team has developed their own sustainability strategy, working with these partners to devise how LOCOG's sustainability aims can be met. Within this is the recognition that it is necessary to achieve the right balance between delivering the Games Technology needs and meeting sustainability objectives. The aim of the technology sustainability strategy is to:
- 1 Deliver sustainable Technology solutions for the Games that meet LOCOG's Sustainability Objectives.
 - 2 Maximise the environmental, social and economic legacy benefits.
 - 3 Adopt a best practice approach to sustainable technology solutions to allow the creation of leading edge case studies to encourage wider application in the market place.
 - 4 Establish a Technology sustainability performance baseline against which future Olympic and Paralympic Games can measure their performance.
- 7.3 The strategy is then supported by an action plan with each partner contributing the actions they will be taking to address the sustainability implications of their part of the technology programme. This includes LOCOG working with all the partners to develop a carbon footprint of the technology infrastructure and equipment. Some partners such as BT and Cisco will be calculating a full carbon footprint of their products and services provided for the Games. Other partners will be providing all the necessary data to LOCOG for them to calculate the embodied carbon footprint of their products and services.
- 7.4 Other initiatives include:
- Addressing the packaging of all the equipment that will be supplied, identifying opportunities for reusing packaging where items will be supplied to venues and then removed afterwards.
 - Identifying opportunities for local recruitment of contract workforces and student placement and internship schemes.
 - Reducing the number of servers needed through virtualisation, server consolidation and centralisation.
 - Identifying ways for equipment to be reused post-Games, either by the technology partner retaining the equipment or through wider reuse initiatives through LOCOG's asset management strategy.
- 7.5 The Commission supports the intention to not have a one size fits all approach to the wide range of Technology Partners where the types of products and services provided are very different. However, there are some areas where we believe a uniform approach is necessary. As covered in paragraphs 4.9 to 4.13, we expect all Commercial Partners to adhere to LOCOG's Sustainable Sourcing Code, with exceptions only occurring if they can demonstrate an equivalent level of compliance through another means. We are aware that

some Worldwide Partners are currently resisting using Sedex to allow LOCOG to monitor their supply chain. They believe that their own supply chain management processes are sufficient and that LOCOG do not need to know their factory locations or what audits have taken place. Unless they can demonstrate that their processes provide at least the level of assurance to LOCOG about their supply chain than would be the case with full compliance with the Sustainable Sourcing Code, they need to adhere to the Code. This needs to be urgently resolved as the Games draw near.

8. Catering

- 8.1 The Commission published a review of food and the Games in March 2010¹⁰. This outlined several areas that we have followed up on in this review. We are pleased to report that LOCOG has been making good progress in a number of areas of their food vision. In addition the food vision itself has won awards such as a Good Food on the Public Plate Award, and a Good Egg Award from Compassion in World Farming.
- 8.2 All the main caterers have been appointed and have committed to meeting the benchmark standards of the food vision and a number of the aspirational standards. Examples of the aspirational standards being achieved that we have been advised include all the milk being organic and freedom food pork and chicken being used in the media centre catering. Menu cards are currently being finalised and approved by the IOC. The Commission is awaiting these menu cards in order to be able to confirm that the benchmark standards will be achieved and the extent to which the aspirational elements of the food vision will be met.
- 8.3 The Commission has also been investigating the affordability of catering that will be on offer in the Olympic Park and at venues generally. We were concerned about the pricing strategy of the catering concessions at some test events, although we are informed that they were consistent with other events during the summer. We are aware that these were not Games-time caterers and understand that LOCOG has not yet set the pricing for the games. The food vision commits to providing a diverse range of food and beverage for all customers, catering for all dietary and cultural requirements, that are high quality, value for money and accessible.
- 8.4 A small sample of the menu options that will be available in the media centre have been shared with the media¹¹. This included freedom food pork and several local foods. Information also outlined that the cost of a main course will be between £4.95 and £5.75 and a cup of tea will cost £1.30. We have been informed that prices for the public will be shared with the Commission once menu cards are finalised and are keen to see the affordability of these meals as this will be important for many people attending the Games.
- 8.5 We are advised that one key pricing element is that where LOCOG is using existing venues the pricing has to have been in place for at least 45 days prior to exclusive use of the venue, or for 6 major events. For example, the football stadiums will have to use the 2011-12 season's pricing not 2012-13.

¹⁰ http://www.cs london.org/downloads/2010_Food_Review.pdf

¹¹ http://www.bbc.co.uk/blogs/adrianwarner/2011/10/feeding_the_public_well_is_key.html

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- 8.6 The rules for people bringing their own food and drink to the Games are being determined. Current ticketing terms and conditions¹² restrict liquids, including drinks, being taken into venues and the Olympic Park in containers greater than 100ml, in line with airport style security restrictions. Food is also listed as restricted, except baby food. However it is currently anticipated that people will be able to bring a modest amount of food into venues, with larger amounts such as picnic hampers not being allowed. Empty bottles will be allowed to be taken in and free drinking water is planned to be available on site. This will need to be clearly communicated to spectators so that they are aware this is the case.
- 8.7 We have seen the tier 1 caterers using CompeteFor to source elements of their supply chain to open up these opportunities to smaller companies who can meet the food vision.
- 8.8 In our food review we said that LOCOG will need to ensure that contracts and operational plans require caterers to reduce the carbon impact of their operations and the produce that they source, and for this to be reflected in menus on offer, taking into account affordability and appropriateness of the occasion. One of the challenges here is the extent to which this is balanced against consumer choice. LOCOG has not sought to restrict the use of meat and dairy products, where these tend to have a larger carbon footprint but instead to allow the consumer to choose from a range of non meat options that will be available. In addition, where possible caterers will aim for a greater carcass utilisation such as with chicken in the media centre to minimise the meat needed. This also assists in making the use of higher standards of meat more financially viable.
- 8.9 The Commission was pleased to see the Fairtrade standard being used as the benchmark standard for all tea and coffee supplied at the Games. We are pleased to hear that all the catering contractors will be using Fairtrade tea and coffee. McDonalds currently use Rainforest Alliance certified tea and coffee. The Rainforest Alliance standard and Fairtrade standards cover many similar areas, however, there are some areas where they differ. Two key differences are that the Rainforest Alliance allows a product to be certified to the standard when only a certain percentage of the product comes from certified sources and Fairtrade requiring a premium to be paid that is invested by and for the local community. This presents a reputational risk for LOCOG and McDonalds if some products are seen as not meeting the equivalent standard. In line with the principle outlined in paragraph 7.5, we expect McDonalds to adhere to LOCOG's policy either through compliance with the stated standard or through demonstrating an equivalent level of compliance through another means. In this case if they can demonstrate that their tea and coffee meets the equivalent to Fairtrade certification.
- 8.10 One element of catering that LOCOG has advised us that they do not control is the supply of food by the Olympic Broadcast Service (OBS) to their outside broadcast staff at outside venues and a couple of Olympic Park venues. Catering for staff at the International Broadcast Centre is managed by LOCOG. As the OBS let their own contracts LOCOG does not have direct control over them. The Commission is taking this up with the OBS

12 <http://www.tickets.london2012.com/purchaseterms.html> section 19.2.3

to understand the requirements they are placing in their contracts and how they will fit in with the London 2012 food vision. The provision of catering to the OBS staff is an inherent part of Games-time catering and the Commission believes that the food vision should be applied.

- 8.11 Food and food packing will form a significant proportion of the waste arising from the Games. The methods for dealing with this waste are covered in section 9 of this report. Food waste is also being tackled at source to seek to minimise it. LOCOG is aiming to halve the amount of protein in Olympic family food to cut the food waste in this area, which will contribute to a carbon reduction. LOCOG has set KPIs with the media centre catering contractor on the amount of stock that LOCOG will buy back after the Games to prevent over-ordering.
- 8.12 Catering equipment is being managed primarily through hiring equipment so that it can go back into the hire market after the Games. LOCOG did consider a deal with manufacturers with options being provided for post Games use but found hiring was the most cost effective approach. With light equipment such as pots and pans in the Athletes Village the contractor will be buying them for their ongoing use with any residual items being distributed via appropriate options such as charities and prisons. Refrigeration equipment is covered in paragraphs 4.17 and 4.18.
- 8.13 Catering is currently being procured for the teams of people who will be running the torch relay around the UK. We are advised that the food vision will form a part of this procurement and the Commission would expect to see LOCOG applying the same standard to this catering as to the Games-time catering.
- 8.14 The Live Site operator procured by the GLA will be letting the catering concession within these sites. As outlined in paragraph 4.16, we expect the operator of the sites to demonstrate how they are contributing to the London 2012 Sustainability Plan and relevant objectives and we expect GLA City Operations to continue to press the operator to meet London 2012 sustainability requirements, setting out where they will and will not comply and the rationale for non-compliance. Given that the Mayor has adopted the food vision and is encouraging other London businesses to do so, the Commission would expect to see the food vision applied to the catering at these Live Sites.

9. Waste Management

- 9.1 In 2010 when we published our waste review¹³ we reported how there was clear intent within LOCOG to meet the challenging target of zero waste to landfill at Games-time, with 70 per cent reused, recycled or composted, and the stretch target 90 per cent of waste arising from construction and deconstruction being reused or recycled. We are pleased to report that the intent is still there and that progress has been made with the appointment of a waste contractor who has committed to these targets and is developing their plans to meet them.

¹³ http://www.cs london.org/downloads/2010_Waste_Review.pdf

9.2 The biggest challenges with meeting the zero waste target will be controlling the materials being disposed of on site as much as possible and getting the initial segregation at point of disposal correct. One of the critical ways that LOCOG is seeking to control the materials is through the packaging of catering sold at venues. They are seeking to procure one supplier of all packaging and consumables (including compostable packaging for food items) that all caterers will be required to use. This will enable all waste food and food-contaminated packaging to go into a compostable waste stream. Coca Cola has committed to only supplying their products in PET bottles where operationally possible to minimise the types of materials going into the recyclables waste stream. They intend to have all the PET bottles arising from the Games go to their PET recycling plant in Lincolnshire so that they can go back into new PET bottles, providing a closed loop. This also forms part of their plan to increase the recycled content of their PET bottles. Other Commercial Partners such as McDonalds and Heineken are also working with LOCOG to align their product packaging to ensure consistency and that they will also support the recycling and composting targets.

9.3 LOCOG is planning to have a three bin system for front of house areas and has been trialling this at the recent London Prepares test events. This comprises compostables, mixed dry recyclables and residual waste. These will be colour coded and clearly labelled with icons showing the types of products that can go in each bin. The Commission commends LOCOG for the work that is being done to get the packaging, bins, and recycling and composting methods aligned to enable their challenging waste targets to become achievable.



Bins at the Handball test event. Photo: Shaun McCarthy

9.4 Experience from the test events shows that getting the communication right with the waste segregation will be vital to ensuring that it is done effectively. Whilst we saw many elements of good practice at the first cluster of test events, the waste segregation was not generally very successful. We are aware that the bins used during the first cluster of test events were not the final versions that will be used during the Games but even with the newer bins that were introduced for the most recent test event the effectiveness of the segregation was still mixed. We feel that some human resources will also be needed to get effective segregation. In our waste review we said that we fully supported the proposal put forward in the Resource Futures report (commissioned by LOCOG into waste management at the Games) for an 'army of Green volunteers' to assist the public in understanding the collection systems during Games-time. The Commission believes that using volunteers to aid people in putting their waste in the correct bins will be essential to ensure that the segregation is effective and that consequently the material is suitable for processing through the appropriate recycling and composting facilities. We are also aware that LOCOG is investigating colour coding options to aid in making it as clear as possible which waste will go in which bin. We would support this.

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- 9.5 One problem with running the waste management functions at the test events is that the full Games-time solution has not been able to be tested, partly because the catering packaging solution is not yet in place. Whilst the waste plans are being gradually enhanced throughout the test events, LOCOG do not think they will be able to test their full combined Games-time waste and catering plans (including having the compostable packaging) at any of the test events so we are concerned that they will not be tested at a major event prior to the Games. They will be testing the compostable packaging itself to ensure it can work within the facilities it will be taken to but not in relation to a test event. This presents the risk of any potential problems or challenges not being understood before they are implemented at the Games.

Recommendation 7

That LOCOG test the full Games-time waste and catering solutions during at least one event prior to the Games.

- 9.6 LOCOG's Games-time waste contractor will normally be the preferred option for overlay contractors to use for waste management during the construction and deconstruction phases, with LOCOG requiring that they are used unless otherwise agreed by them. The costs to contractors will be determined on the basis of a rate card agreed between the contractor and LOCOG. It has begun to liaise with overlay companies on their materials to seek to minimise waste arisings and look for reuse options.
- 9.7 In our waste review we recommended that a specific reuse target be set for the bump out and deconstruction phases of the project (along with the wider transformation work that will be carried out by the OPLC and will be covered in other reports). LOCOG has not set a reuse target but has taken the approach to maximise the amount of material that is hired and commodities that are on a buy back arrangement. This, combined with plans to look for resale opportunities as well as some other reuse options shows a clear intent to seek to maximise the reuse of materials post-Games where practicable and we accept that a target is not necessary in this case.
- 9.8 The Waste and Resources Action Programme (WRAP) has been working with LOCOG on a number of new tools including the development of a new online Resource Management Plan (RMP) tool for the event industry. Given that the event management industry has traditionally been a very wasteful industry, with the breakdown of an event frequently seeing a lot of materials thrown away as the focus quickly moves onto the next event, this is very welcome. LOCOG is looking for their contractors to use this RMP tool in managing their waste and the Commission looks forward to seeing how this develops and how it can assist LOCOG in monitoring and measuring their waste and meeting their targets.
- 9.9 Waste management and the potential impact of spectator litter around venues and road race routes, was covered in our waste and resource management review¹⁴ where we recommended ***“That City Operations teams, both in London and other locations***

14 http://www.cs london.org/downloads/2010_Waste_Review.pdf

around the country, set objectives for waste management that are consistent with those adopted by London 2012 and that particular emphasis be made on ensuring non LOCOG-controlled external venues fully meet these standards”. Related to this is litter from either uncontrolled viewing areas on the coast or from boats in Weymouth, which is an important biodiversity issue as nearly all litter will eventually end up in the sea if not immediately picked up. LOCOG are engaging with and providing guidance to operational planning teams and this is covered further in section 13 on the last mile.

- 9.10 The Live Site operator procured by the GLA will manage waste arising within these sites. As outlined in paragraph 4.16, we would expect the operator of the sites to demonstrate how they are contributing to the London 2012 Sustainability Plan and relevant objectives and comply with our recommendation above. The GLA are working with the operator to set standards with the intent to have a zero waste to landfill target and adopt an approach to maximise recycling but there is not yet a specific recycling target. We understand that the GLA is looking to use experience from within the organisation to promote recycling at their sites but that there is some reluctance to set a recycling and composting target. This is partly because they do not believe they can control the catering packaging (as LOCOG are planning to do) which would be necessary to ensure that food packing and food waste can be collected together for composting. The Commission is concerned that without a recycling target there will not be an incentive for the operator to increase recycling levels, other than an intent by the GLA to report the figures, since a zero waste to landfill target could be met through an energy from waste process.
- 9.11 As outlined in paragraphs 4.15 and 4.16, the Commission recognises the challenges that the GLA face in procuring an operator for these sites whilst applying a range of requirements to them. We welcome the intent to achieve zero waste to landfill and urge the GLA to do all they can to maximise the recycling and composting from the sites.
- 9.12 The GLA will also manage the London Media Centre (for journalists from across the world who will cover the Games but not have accreditation to be in the media centre on the Olympic Park) through a contractor. Like the Live Sites they will be aiming to achieve zero waste to landfill and adopt an approach to maximise recycling but there is not yet a specific recycling target. Plans are in place to significantly reduce paper use at the centre, with a target of an 80 per cent reduction compared to a traditional media centre. This includes the intent to have a charging system for anyone wishing to print. We support this intent to first reduce the volumes of waste arising from the centre but, given that the most significant waste streams are still likely to be paper and other recyclable materials, the Commission would expect the recycling rates to be high and believe that the GLA should aim for a very high level of recycling from the venue.

10. Employment, skills, volunteers and workforce

- 10.1 At the time of the Commission’s 2010 Annual Review we highlighted concerns about the resourcing for employment and skills programmes and how this could hinder LOCOG’s plans for local employment forming part of their 100,000 strong Games-time contractor workforce. Addressing this, we made the recommendation “That the GLA Group resolves

the issue of resources available to support CompeteFor, Diversity Works for London and job brokerage as soon as possible to ensure that the good performance in local employment continues.”

- 10.2 We are pleased to report that funding has been secured for local employment programmes and the job brokerages are still operating in the host Boroughs and that they are engaged with LOCOG and their contractors in seeking to provide local people to contractors to meet part of their workforce requirements.
- 10.3 LOCOG has set a target zone of 15-20 per cent local employment. In the current staffing of 2300 people there are 20.1 per cent residing in Host Boroughs, which was stable over the last quarter while staff numbers continued to grow. LOCOG has also set a target zone of 7-12 per cent previously unemployed and current staffing is at 13 per cent. The Commission congratulates LOCOG on its performance so far.
- 10.4 LOCOG’s contractors expect to have a minimum of 10,000 entry level opportunities in London at Games-time and the brokerages estimate they can fill around 6,000 of these. Catering, cleaning, waste, security, transport and retail have been identified as the main opportunity areas, with 17 contractors forming 80 per cent of requirements.
- 10.5 The contractors have been setting out their needs so that the brokerages are able to get people ready for it, with one of the main challenges now being how many people they are able to bring forward.
- 10.6 The Commission was concerned that contractors were not required to support measures such as local employment, although they are required to report on it. However, they have signed up to support it through their own corporate social responsibility commitments and to use a free recruitment resource. Contractors are also expected to source locally via their own methods and assure LOCOG they can get the resources needed. Where insufficient numbers can be found locally opportunities going through job brokerages will go across London and then to UK as a whole.
- 10.7 Outplacement of people after the Games is being considered as well, given that most job opportunities will be short term. This includes some ongoing opportunities within contractors and looking at staff being needed for 2012 Christmas employment at Westfield in Stratford.
- 10.8 There are a range of targets for the diversity of LOCOG’s workforce (including contractor workforce). These cover disability, gender, age, faith, BAME and sexuality and are listed in the table in section 3. These are applied to the volunteer workforce as well as the paid workforce. At present they are on target or very near target with measures in place to cover any shortfall.
- 10.9 An example of a commercial partner supporting LOCOG’s diversity targets is that UPS will be monitoring their workforce diversity and included this when tendering for short term staff. The winning contractor scored highest on diversity and inclusion and will report as LOCOG require.

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- 10.10 Volunteer recruitment centres have been designed to address accessibility requirements, with visibly impaired potential volunteers also being met at the nearest station. Volunteer interviewers have been trained in diversity and inclusion, including subconscious bias, to ensure interviewees get a fair hearing.
- 10.11 All London 2012 volunteers (known as Games Makers) will receive training which will include diversity and inclusion and sustainability. Training will be at three levels, firstly orientation, which will include generic sustainability and diversity and inclusion principles of LOCOG. There will also be venue specific and role specific training. Games makers will have a pledge to sign, including a commitment to inclusivity, which will be important where people of diverse beliefs will need to work as one team. The detail of the training programme was in development at the time of this review and the Commission will continue to monitor this as it develops.



London 2012 volunteer uniforms. Copyright LOCOG / adidas

- 10.12 Sustainability and diversity issues have been incorporated into the design and sourcing of volunteer and staff uniforms. They have been designed to be inclusive, addressing issues such as sizing, easy grip zips, contrasting colours and that tailors will be available to make necessary adjustments for individuals. The Commission is also pleased that the uniforms will be made from a significant proportion of recycled materials, for example that the polo shirts that will be 100 per cent recycled polyester and the technical officials' shirts which will be made up of 45 per cent recycled polyester.

10.13 The sourcing of uniforms is also being tackled with much supplied by adidas who, as reported in our merchandising review¹⁵, has publicly disclosed their supply chain for London 2012 clothing. Some elements will also be supplied by Next, with both adidas and Next committing to only using their higher rated factories to supply London 2012. More information on plans for sustainable sourcing and supply chain management can be found in our merchandising review.

10.14 GLA Games-time volunteers (known as London Ambassadors) are covered in paragraphs 12.11 to 12.13.

11. Logistics

11.1 Logistics for LOCOG are managed by in house staff and its logistics provider (tier 2 sponsor) UPS and other supporting companies. They have developed an internal logistics sustainability plan with the following draft aims:

- 1 100 per cent of LOCOG Logistics managed goods to be delivered to Games venues by more sustainable modes or methods such as water, non-idling policy, night time deliveries, telematics and electric vehicles¹⁶.
- 2 Reduce LOCOG owned carbon emissions and minimise our carbon footprint.
- 3 100 per cent of Furniture, Fixtures and Equipment (FF&E) to be sourced in accordance with the LOCOG Sustainable Sourcing Code. The hierarchy to sustainably utilise assets is: reduce scope, hire assets, lease assets then lastly buy assets.
- 4 100 per cent timber derived FF&E holds FSC certification.
- 5 Reduce the quantity of assets and packaging to the minimum required.
- 6 Reuse or recycle at least 90 per cent of LOCOG owned assets and any packaging handled.
- 7 Work with partners to demonstrate and evaluate more sustainable approaches to delivering goods and encourage others to adopt similar approaches throughout the logistics sector.
- 8 Measure and compare our Olympic operations with business as usual operations to effectively assess the benefits.
- 9 Impact delivery patterns for freight to London by trialling new methods such as night time deliveries and barges.

11.2 One of the challenges that has been faced by LOCOG logistics is that they believe this is the first time that the sustainability implications of the logistics programme for an Olympic and Paralympic Games have been properly addressed. This has meant that there has not been a benchmark of performance to compare against or any manual for how to go about it. The Commission commends LOCOG for tackling this area and recommends that the lessons learnt from it are collated and form part of the learning legacy from the Games.

¹⁵ <http://www.cs london.org/downloads/Sustainably-Sourced-2011.pdf>

¹⁶ All UPS vehicles are compliant with Euro 5 (2008/9) directive for light passenger and commercial vehicles

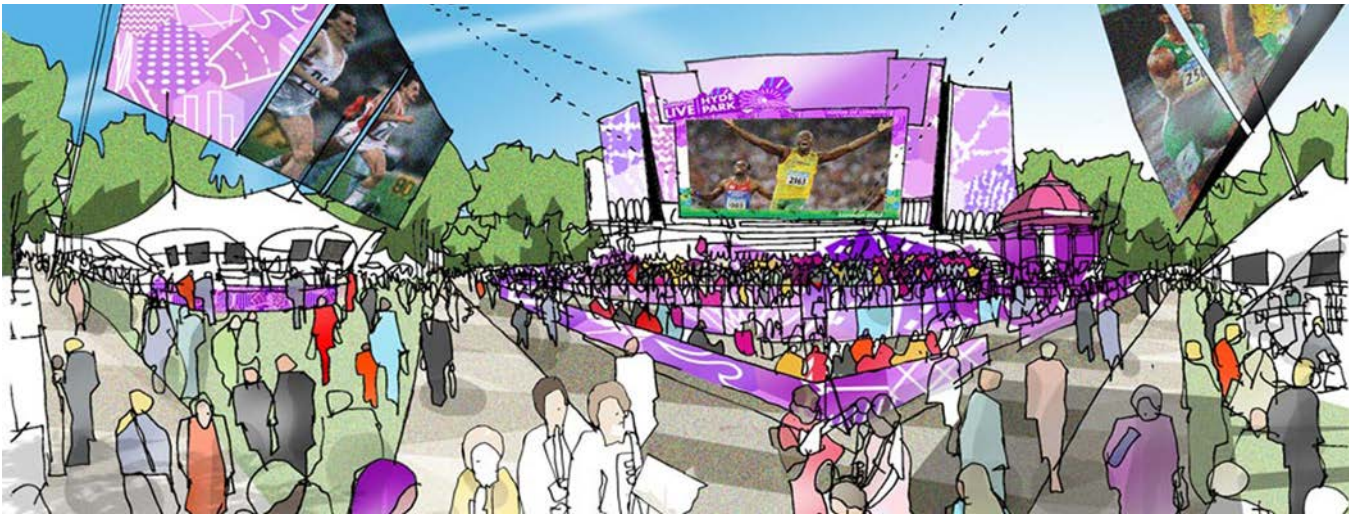
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- 11.3 The logistics programme was still in development at the time of writing this report so some areas are still being finalised. The Commission will continue to monitor this area but it was clear that there will be some good sustainability initiatives in the logistics fleet and in the way it operates.
- 11.4 The movement of goods by rail to the Olympic Park is not going to be viable as it is too close to warehouses at Tilbury and Stevenage to deliver significant carbon savings and would require extra transfers between modes, as the railheads at the Olympic Park have been removed for the land to be converted to Games-time uses. Rail is still being considered for the football venues due to the greater distances involved.
- 11.5 LOCOG had hoped to move the Athletes Village furniture to the Olympic Park by barge, as this requires bulk movement of material that can be sent on the timescales barge movements require, unlike the rapid movement of items during bump in and out. They have carried out studies of this but there have been challenges with identifying suitable wharfs near the Park, as the ones used during construction have been removed to allow their sites to be developed. There are also challenges with low bridges on the routes and possible need for dredging. It is possible to move from the Tilbury warehouse to sites on Thames (20 miles by water) and then transfer final 5-8 miles by road which is under consideration.
- 11.6 UPS has also brought new demountable boxes into their fleet that can be coupled together and moved in twos to give efficient transfer of products by increasing the volumes moved per vehicle. This and the use of barges are to be evaluated as they believe that road using boxes and a combination of barge and road movement are about equal in carbon emissions, with both being much better than standard road transfer. The Commission looks forward to seeing this evaluation.
- 11.7 UPS will use a fleet of approximately 150 vehicles for London 2012, all of which will be compliant with LOCOG's Low Emissions Venues policy. It has 20 electric vehicles in London at present and expects to use 15 of these in the Games fleet. UPS had planned to have a new advanced biodiesel with 50-70 per cent biofuel but are struggling to source it at present. The London 2012 oil and gas partner, BP, are not able to provide this as they don't yet have the quantities to supply commercially outside of their commitment to provide fuel for London 2012 official vehicles. UPS hopes to have an alternative source but this is to be confirmed.
- 11.8 UPS also has 10 biomethane tractors in London at present and are testing them for use in Olympic fleet. These are supplied using methane from a landfill in Surrey.
- 11.9 A new telematics system is to be introduced in time for the Games to optimise the efficiency of their deliveries and they are also continuing with training of their driver fleet, a programme that is so far delivering a 12 per cent fuel reduction.
- 11.10 Logistics does not have a specific Resource Management Plan but are looking at how they can design out, minimising and reuse packaging. For example, furniture is stripped

to a pallet to minimise packaging and they are supporting technology in reusing their packaging. It has proved difficult to set targets for packaging reduction due to the absence of a baseline and comparators, being unclear what to benchmark against.

- 11.11 During test events the Logistics team has found more damage to the items they moved than was expected. This is being analysed to understand why and how it can be avoided. LOCOG will still reuse damaged equipment in the back of house to prevent waste.
- 11.12 Whilst UPS will be providing LOCOG's logistics, other companies will run their own logistics operations. There are a number of examples of sustainability initiatives within these operations including:
- Coca Cola investing in a new warehouse with PV panels, additional skylighting to reduce the lighting needed and a ground source heat pump.
 - Coca Cola using a fleet of vehicles powered by a biogas from a local landfill site to transport their products.
 - McDonald's logistics supplier running part of their fleet on biodiesel made from used cooking oil from McDonald's restaurants.

12. GLA City Operations

- 12.1 The GLA will be managing the London City Operations programme which aims *"To provide an inspirational citywide experience for everyone participating in the Games in London, to safeguard the smooth running of London in Games time, and to maximise the opportunities for legacy from this work"*.
- 12.2 The GLA has established a team to coordinate City Operations and during 2011 agreed to fund a member of the GLA Sustainable Development team to manage sustainability issues and aim to secure certification to BS 8901. They will remain with City Operations until after the Games.
- 12.3 In previous reports the Commission has been critical of the work of the GLA City Operations team with regard to the sustainability implications of the areas they are managing and of the level of intent to address these issues. During 2011 we are pleased to say that there has been significant progress made in this area, with dedicated resource being brought in to work through the issues and aim to secure certification to BS 8901, the British Standard for a Sustainable Event Management System. This includes identifying their most significant sustainability issues, setting a series of targets and implementing plans and programmes to address them.
- 12.4 As a result of work to implement BS 8901 all procurement since July 2011 has been using a sustainable procurement procedure and we have also seen evidence of earlier procurement addressing sustainability issues, often as a result of advice provided by LOCOG.



Artist's impression of the Hyde Park Live Site

- 12.5 Contractors are required to submit a sustainability management plan to the GLA and reporting mechanisms will be set up to track the implementation of these. High risk contracts will then be prioritised for auditing of their reporting.
- 12.6 Whilst there is not the opportunity to run test events for City Operations in the way LOCOG has for their venues, the GLA are testing out a range of scenarios in desk top exercises. This is including how sustainability incidents will be managed.
- 12.7 The Commission welcomes the implementation of BS 8901 by GLA City Operations and, whilst we wished to see work progress sooner than it has done to tackle the sustainability implications of this programme, we recognise the work that has been done and the challenges that the programme is tackling. In some areas challenges are occurring as there is now minimal time left before the Games. We hope that lessons will be learnt by others following on from this work about addressing sustainability implications at the earliest stages of a programme, as experience from the ODA and LOCOG has shown that this can lead to financial benefits as well as sustainability benefits. It also prevents the programme being left with difficult negotiations where contractors are already being brought on board.
- 12.8 Implementing BS 8901 has been a very useful learning experience for the GLA and provides a good example of how it can be implemented within a public sector organisation that manages events. The Commission believes that GLA City Operations should be the first of many to implement the standard and in our 2010 Annual Review¹⁷ we recommended “That government and the GLA mandate certification to BS 8901 for all official events.” One step in this should be that following the Games the GLA events team should transition City Operations BS 8901 certification (once achieved) over to their team and then apply the standard to all their events. The model of implementing BS 8901 and working with a Live Site operator to implement sustainability standards also should provide a useful contribution to the learning legacy from the Games as it gives a model which can be implemented and built upon at many future events.

17 <http://www.cslondon.org/downloads/CSL-Annual-Review-20102.pdf>

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- 12.9 At present the Live Site operator, Live Nation, has not committed to implementing BS 8901 across their company, although they are considering it and are applying the key principles of BS 8901 in their organisation of Live Sites. The Commission believes that, as part their contribution to the sustainability of London 2012 and as a demonstrable legacy from it, they should begin implementation of BS 8901, with a view to securing certification by Games-time if practicable.
- 12.10 We have addressed issues of waste and catering at Live Sites and the London Media Centre in sections 8 and 9 of this report. Carbon management is being addressed through the use of an in house carbon management tool and working with LOCOG's carbon management consultants to calculate the carbon footprint of the highest impact areas and seek to manage it.
- 12.11 The London Ambassador volunteer programme is recruiting 8,000 volunteers to be the face of London during the Games. These are in addition to the 70,000 volunteers LOCOG are recruiting to help stage the Games. The GLA are aiming to have a volunteer team that matches the diversity of London and believe they are currently on track to achieve this. They are also planning to have some young volunteers, with the East London Business Alliance working with 14-18 year old volunteers for one pod. Ambassadors are also being directed to other volunteering opportunities specific to their interests and it is hoped that this will provide a boost to volunteering across London.
- 12.12 Ambassadors will be stationed in pods that will be constructed and placed at key locations around London to provide advice and support to people coming from across the UK and the world to attend the Games or experience the atmosphere in London at Games-time. The pods are being designed with the sustainability of the materials in mind, including applying the London 2012 policy on the use of PVC. There will also be a waste management plan to address the post-Games reuse or recycling of the pods.
- 12.13 Uniforms for the volunteers are being sourced via TfL, using their experience of uniform procurement. This includes addressing the materials being used and the ethical sourcing of them. Suppliers will be expected to comply with the ETI base code and register on Sedex, as LOCOG has required of their procurement. A procedure to manage complaints within the supply chain is also being developed and if not in place in time, use of the LOCOG process is being investigated.
- 12.14 In our biodiversity review we addressed the ecological implications of hosting Live Sites in Hyde Park and Victoria Park. Whilst the parks do host events each summer, meaning that there is some experience and knowledge around their use as venues and the implications of this, their use as Live Sites throughout the Games is likely to involve greater use in terms of time and the numbers of people attending over that time. As a result we recommended that as part of developing plans to address the sustainability implications of all elements of City Operations, the GLA set out and implement clear plans for how they will ensure the ecology of all Live Sites under their control is appropriately managed and monitored, with mitigation plans developed and implemented where necessary. We understand that they believe that any risks in this area are relatively low and have discussed any potential issues

with Live Nation, who are addressing this through the planning process, which includes the submission of a biodiversity report & statement. The Commission recommends that a mitigation plan be developed to deal with any unexpected issues that could arise during the Games and to remediate if required post-Games.

- 12.15 The GLA are implementing several initiatives to make London more accessible for the Games. It is recognised that London, like many cities, has historically not been particularly accessible but that there are many places that are more accessible than might be realised. To promote this a new inclusive London website has been launched to communicate accessible locations and business, including mapping 10 hotspots with greatest use and showing routes from transport locations to key sites. From the launch of the site in March 2011 to November 2011 the site had in excess of 5 million hits. There is also support provided for businesses to show how they can improve the accessibility of their sites.
- 12.16 Funding has been secured to deliver a series of projects to improve the accessibility of the Southbank area. As of November 2011 designs had been approved, including consulting the Built Environment Access Panel and work was getting underway. Measures include increasing dropped curbs, improving gradients and resurfacing areas. The schemes are scheduled to be delivered by March 2012.
- 12.17 Accessibility of Live Sites has also been considered with viewing platforms to be in place and the Paralympic Live Site in Trafalgar Square being fully accessible.
- 12.18 In order to extend the reach of the Games across London and into communities that may otherwise feel disenfranchised by the Games, the GLA are co-ordinating a series of smaller scale events. These include the Outdoor Arts Festival and Hidden London. They also hope that by taking these events to more unusual places in a range of diverse communities they will bring an economic benefit to these places. The Commission supports the intention to extend the reach of the Games, particularly to communities that might otherwise feel disenfranchised, and hopes that these initiatives are able to do this.

13. The last mile

- 13.1 The last mile refers to the area between an ODA designated transport hub and a London 2012 venue, or the area immediately surrounding a road race route. It has previously been unclear who will take the coordinating role in these spaces but during 2011 LOCOG agreed to coordinate most of the Last Mile routes. As we were finalising this report the Commission became aware of two exceptions to this. We understand that the central London zone and areas around road races are to be coordinated by TfL and that the Last Mile areas around the regional football stadia are to be coordinated by the relevant Local Authority. There was insufficient time for the Commission to verify this and we will continue to investigate as part of our Annual Review. The duties of care and thus responsibility for actions on the Last Mile remains with the body that normally manages it, e.g. waste collection and disposal. The multi-agency approach to developing plans and contingency plans is intended to manage down the collective risk to delivery. However, in some areas it still leaves it unclear as to precisely which organisation is taking this responsibility.

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- 13.2 The waste and litter implications of this are mentioned in paragraph 9.9, where we also quote our waste and resource management review¹⁸ which recommended that City Operations teams, both in London and other locations around the country, set objectives for waste management that are consistent with those adopted by London 2012 and that particular emphasis be made on ensuring non LOCOG-controlled external venues fully meet these standards. The Commission is pleased to report that the ODA Transport team are planning to use the same waste bins as inside venues at their Park and Ride sites. Apart from this, the Commission is concerned that as waste management remains with the Local Authority concerned in each area, there will be inconsistency of approach between the standards within the venue and the standards immediately outside of it, and between the areas around different venues and different exits from the Olympic Park.
- 13.3 The GLA has been raising this with London Boroughs who are hosting London 2012 events, via their Chief Executives and through the Borough Augmented Safety Advisory Group and the LOCOG City Liaison team has been looking to influence via their role in coordinating activity outside venues. Boroughs who are hosting events have been given some additional funding to provide enhanced services at Games-time and the Commission believes that they need to ensure a level of consistency between the waste and cleansing standards outside the venues with those operating inside them, along with other areas such as accessibility, security and health and safety.
- 13.4 Without clear co-ordination there is a risk that the standards immediately outside the venue will be different from those within it and that standards will also vary considerably from venue to venue, or even at different exits from the Olympic Park. As the body with overall coordination the LOCOG City Operations team needs to continue to influence the relevant local authorities to ensure that there are appropriate plans for street cleansing, waste and recycling, accessibility, security and health and safety in the last mile around all venues and race routes where it is the lead coordinator. They should then support TfL for race routes and the central London zone and the host Local Authorities and City Operations team in GOE for venues around the country, where these organisations have the lead role.

Recommendation 8

That the LOCOG City Operations team continue its work in ensuring appropriate plans for street cleansing, waste and recycling, accessibility, security and health and safety in the last mile around venues where it is the lead coordinator and that it supports TfL and Local Authorities where these organisations take the lead.

- 13.5 Accessibility in the last mile is being addressed by a combination of ODA Transport works at the final transport hub, for example local stations and Park and Ride sites, and LOCOG City Operations for the onward route from transport hub to the venue, and where appropriate via accessible shuttle provision and operation. ODA Transport teams have carried out assessments of the most appropriate routes from the station to the venue and making plans for any actions or capital works that are needed. Where infrastructure works

¹⁸ http://www.cs london.org/downloads/2010_Waste_Review.pdf

are required this is expected to be met by ODA funds, smaller operational interventions are expected to be funded by LOCOG.

- 13.6 Our biodiversity review highlighted the access route from Cheshunt station to the Lee Valley White Water Centre which takes spectators through part of the Lee Valley Regional Park that contains protected areas. This provides an opportunity for the spectators to enjoy a quality natural environment. It also means that there is a potential risk that there could be damage to this environment. LOCOG, the ODA Transport Team and the Lee Valley Regional Park Authority (LVRPA) need to manage this risk and are looking at how they can ensure spectators keep to the main route through the park and not stray into more sensitive areas. This should be achievable with the use of volunteer stewards and the Commission expects appropriate measures to be put in place.
- 13.7 An issue related to the last mile is that in partnership with the relevant Local Authority, LOCOG has installed a number of permanent big screens at sites around the country and these are expected to be operated as Community Live Sites during the Games. LOCOG will provide a feed to these screens and dress them during the Games with the host Local Authority managing the sites. LOCOG has provided guidance to them on sustainability but it will be up to the Council to determine the standards of areas such as waste and catering. In line with 2008 Annual Review recommendation that “All users of the London 2012 Brand should be required to demonstrate how they will contribute to the London 2012 Sustainability Plan and relevant objectives”, the Commission looks forward to seeing how these guidelines have been implemented by host Local Authorities.
- 13.8 As part of the concept that the whole of London and other towns and cities hosting events will be welcoming the world to the Games, there will be a programme of dressing areas with a consistent set of materials that form part of the “look and feel” of the Games. The sustainability implications of these materials are covered in section 6.

14. Ceremonies, torch relay and other events

- 14.1 LOCOG has set up a separate company London 2012 Ceremonies Ltd to manage the opening and closing ceremonies for the Olympic and Paralympic Games. Whilst the content of these ceremonies is a carefully guarded secret, the Commission has been in discussion with LOCOG about how sustainability issues are being managed by the ceremonies company. It has developed its own sustainability plan and this is embedded in its procurement, which uses the same governance model as LOCOG (which we covered in our review of LOCOG procurement¹⁹).
- 14.2 LOCOG’s sustainability team area advising London 2012 Ceremonies Ltd on their sustainability issues, including taking oversight of high risk and high value procurement. They are applying the principles of BS 8901, although they do not come directly under LOCOG’s certification to the standard, as they are included with other contractors who are managed through the contract management process.

19 http://www.cslondon.org/downloads/2010_LOCOG_Procurement_Review.pdf

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- 14.3 There are some areas of concern at present, such as how they will be dealing with waste post-Games, given that they will have a number of bespoke and non traditional items to dispose of. Some materials from the ceremonies are likely to have value as memorabilia but there will inevitably be materials that may prove a challenge to reuse or recycle.
- 14.4 The Commission's 2011 Annual Review will be picking up the area of communicating sustainability and how the Games will look and feel sustainable and liaison with London 2012 Ceremonies Ltd will continue as part of this.
- 14.5 In 2007 London 2012 made commitments to deliver a low carbon torch and cauldron, in conjunction with Sustainability Partner EDF Energy, as part of their contribution to the sustainability of the Games. In June 2011 they announced that they would not fulfil the commitment for the Olympic torch. The Commission is disappointed that LOCOG and EDF Energy have failed in this objective as whilst the carbon contribution of this initiative may have been relatively small, the power of the message across the globe would have been highly significant. The Olympic torch is a universal symbol of the Games, and a low-carbon torch would have been an unequivocal demonstration of London's commitment to a truly sustainable Games. The promise of a low-carbon torch was made in 2007 so the excuse of "we ran out of time" is not acceptable. While we acknowledge that EDF Energy invested considerable effort into the low-carbon torch concept, it was known that this is a project with an immovable deadline and therefore commitments must be delivered within these deadlines.
- 14.6 We are continuing to engage with LOCOG over the commitment to a low carbon cauldron. Like the opening and closing ceremonies the cauldron design is a closely guarded secret but we have discussed the concepts being considered and have been assured that the commitment to a low carbon cauldron, including considering the embodied carbon, form part of the design concepts. The Commission will continue to engage with LOCOG over this and expect the commitment to a low carbon cauldron to be delivered.
- 14.7 Whilst the commitment to have a low carbon torch was not met, LOCOG are taking steps to management impacts of the torch relay, which will travel round the UK for 70 days prior to the Games. The most significant change from previous relays is that it will be taking place purely in the UK and Ireland, instead of travelling round the world. LOCOG has limited the number of vehicles that will accompany the relay, with commercial partners now having one vehicle instead of two. The carbon footprint of the relay is being calculated. LOCOG are tendering for a supplier of lunches for staff supporting the relay and are looking to apply the food vision to this.
- 14.8 The overnight stops on the relay will involve events of different sizes. These will be largely managed by the Local Authority hosting it. LOCOG are seeking to influence this. They are pushing for local and seasonal food to be sold but the rest of the food vision is not expected to be delivered. They are also pressing for recycling to be maximised at the events and requiring the waste figures to be reported to them. As with other areas where the London 2012 brand will be associated with the event, the Commission expects all parties involved to demonstrate how they will contribute to the London 2012 Sustainability Plan and relevant objectives.

- 14.9 In our biodiversity review we covered the flowers and the precious metals for the medals that will be used as part of the victory ceremonies. We noted the intent within LOCOG to seek sustainably sourced flowers and metals and recommended “That LOCOG demonstrate how they will ensure that the flowers and medals can be used as symbols of sustainability at Games-time.”
- 14.10 Whilst we are unable to comment specifically on the flowers for the Games for reasons of confidentiality, we are able to provide assurance that we have investigated this area and expect LOCOG to be able to demonstrate how they can be a symbol of the sustainability of the Games.
- 14.11 A florist will also be present in the Athlete’s Village and similar standards of sustainability are being applied to this contract wherever possible.
- 14.12 The precious metals for the medals are being supplied by Rio Tinto, who are a tier three sponsor of London 2012. The main supply is from mines in the USA, with an exploration sample of copper coming from a new mine in Mongolia (pictured). Small quantities of other metals are coming from suppliers in Australia and Cornwall. A full chain of custody is being obtained for the metals, including ISO 14001 certification for mines and use of the Responsible Jewellery Council standards. The Commission understands that this is a first for the Games.



Oyu Tolgoi mine in Mongolia. Photo: Brücke-Osteuropa. Inset: London 2012 medals. Copyright LOCOG

15. Transport

- 15.1 The Commission published a snapshot review of transport in 2010²⁰. During this review we have followed up on areas that specifically relate to Games-time operations.
- 15.2 London 2012 committed to the passenger vehicle fleet²¹ having average CO₂ emissions of 120g/km or less. The official vehicle supplier, BMW, has committed to achieving this target and will be doing this through a combination of vehicles, including Minis, 3 and 5 series BMW vehicles featuring their efficient dynamics technology. They will also be providing approximately 200 electric vehicles as part of a fleet of 4,000. Having more electric vehicles was deemed to not be operationally possible, due to the intensive use of the fleet and the requirements for recharging. In addition a greater use of Electric vehicles would have required a substantially larger charging infrastructure, focussed primarily on specific depots which would not have had a significant legacy value compared to the infrastructure being installed.
- 15.3 LOCOG has been working with their sustainability partners EDF Energy and GE, and with TfL on a strategy for electric vehicle charging. They intend to install 120 new Source London²² compliant recharging points, which will add to the network across London in legacy. These are to be installed the car parks at Westfield in Stratford, Excel, Stratford International, Park Lane (Westminster), and the Media Centre on the Olympic Park. A small number will also be installed at venues. Each location is to partner with Source London to ensure the points are available in legacy.
- 15.4 All BMW vehicles are expected to meet exceed the requirements of the LOCOG Low Emission Venues policy, as the majority will meet the Euro 6 emissions standard.
- 15.5 There will be 120 wheelchair accessible vehicles, such as MPVs with ramps in the fleet, coming from existing motability vehicles. 15 of these will be deployed during the Olympics and all of them will be deployed during the Paralympics. BMW will also be adapting up to 50 vehicles in order to allow them to be driven by drivers with a disability, including by disabled volunteer drivers, depending on the numbers coming forward. This is the first time that this will be possible at an Olympic or Paralympic Games.
- 15.6 LOCOG has procured a fleet of approximately 1,100 buses and coaches from a range of operators around the country to form their Games-time fleet. All vehicles will meet the Euro IV standard or better for particulates, or will have particulate traps fitted to bring the emission to the required standard. Where vehicles have been upgraded to meet LOCOG's requirements, this will from a legacy benefit to the air quality in the places where they are used.
- 15.7 The bus and coach fleet will be an entirely diesel-fuelled fleet. In our 2010 Annual Review we said that we were disappointed with the lack of innovation with respect to alternative

20 http://www.csllondon.org/downloads/CSL_Transport_Review.pdf

21 Defined as vehicles having a maximum of 8 seats not including the driver

22 <https://www.sourcelondon.net/>

fuels. We also said that the challenge for LOCOG is to deliver an overall high standard and to take the opportunity to showcase new technology where operationally feasible. LOCOG state that their experience when engaging with the marketplace for buses and coaches was that there was no capacity available for the supply of any alternatives to diesel. In addition, where any alternative options were being introduced into fleets, such as the gradual introduction of diesel-electric hybrid vehicles into the TfL fleet, they would just be taking them away from their current use. We remain disappointed that the UK market was unable to supply alternative technologies to showcase in the Games-time fleet despite the efforts of LOCOG to engage with the marketplace.

- 15.8 LOCOG has been in discussion with the Department for Transport about allowing some Paralympic buses to be adapted to carry six wheelchairs at once (instead of one) by removing some of the seating. There is agreement in principle for a moving-arm six-wheelchair bay solution and an inspection is awaited for an alternative fixed-arm six-wheelchair bay conversion, which reflects the improvement comments for IPC and GB wheelchair basketball athletes.
- 15.9 A series of measures are being taken to enhance the accessibility of the London Underground network in time for the Games. By July 2012, 65 London Underground stations will be step free from street to platform and a further five provide step free interchange. Of these 70 stations 42 are either venue stations or provide key interchanges at Games-time. At these 42 stations there are 131 platforms, but as of May 2011 only 48 platforms offer level access on to the train.
- 15.10 Solutions are therefore needed at 73 platforms in order that wheelchair users and other people with reduced mobility are able to board trains safely. The ODA and London Underground are working on two solutions to this problem:
- Temporary platform humps which raise a section to the platform to the level of the train floor. Although temporary, it is anticipated that they will have a lifespan of several years and so do offer a legacy benefit.
 - Manual boarding ramps for use at some stations. These are similar to those deployed by staff on national rail stations and are simply placed across the step and gap between the train and platform, allowing a wheelchair user to board.
- 15.11 Every London bus has a level access floor for wheelchair users and there is a high level of accessibility on the river service. In addition the ODA will be providing accessible shuttle buses at key locations to overcome gaps in the accessible transport network.
- 15.12 The Commission published a statement on the active travel programme on 1 December 2011²³. In it we said that we are pleased to see a comprehensive set of walking and cycling routes available for Londoners and visitors to use in the lead up to Games-time, during the Games and after the Games are over.

23 <http://www.cslondon.org/2011/12/commission-statement-on-the-active-travel-programme/>

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- 15.13 We are satisfied that there are adequate plans for bike parking at the Olympic Park and that all reasonable efforts have been made to enable people to reach venues by walking and cycling wherever possible. The London 2012 Active Travel website²⁴ adequately signposts people to other information sources including a map of private bike hire venues and to the Transport for London Active Travel website.
- 15.14 In our transport snapshot we noted that spectators travelling to the Games will be allocated free public transport within London and wished to see this principle be extended to spectators wanting to hire cycles. We have now been advised that this would be logistically very costly to apply to the Mayor's cycle hire scheme and therefore is not a practical solution. We cover this further in our statement on active travel.
- 15.15 The Commission remains in active dialogue with all relevant parties on the sustainability implications of the Olympic Route Network and will be covering this further in our 2011 Annual Review, which will be published in May 2012.

²⁴ <http://www.london2012.com/making-it-happen/sustainability/active-travel-programme/>

Appendix 1 – Method

1. Methodology of review

The review was led by Jonathan Turner of the Commission for a Sustainable London 2012, supported by Emma Synnott. The fieldwork was carried out during the period from June to October 2011.

Interviews and test events

We carried out a series of interviews with staff involved in Games-time delivery across the London 2012 programme and with a range of relevant stakeholders.

These interviews covered:

- The programmes in place.
- The systems designed to deliver them.
- Outcomes to date.
- Delivery challenges.
- The sustainability of outcomes.

We interviewed or spoke with the following people:

Organisation	People
Environment Agency	Rob McCarthy
	Rob Harding
GLA	Kevin Austin
	Patrick Feehily
	Rhiannon Lewis
LOCOG + commercial partners embedded within LOCOG	Adele Stach-Kevitz
	Alan Williams
	Amanda Aukett
	Amanda Kiely
	Andy Thompson
	Arumza Rashid
	Claire Costello
	Daniel Abda
	Dan Reading
	David Stubbs
	Deborah Sackett

	Jan Matthews
	John Fryer
	Jose Dhooma
	Julie Duffus
	Mark Todd
	Neil Earnshaw (also ODA Transport)
	Nicola Francis
	Paul May
	Paul Modley
	Phil Cumming
	Steve Frost
	Toby Hiles
	Tom Fogden
	Will Freeman
Natural England	Jacqui Stearn
	Gordon Wyatt
ODA	Holly Knight
SGS	Beck Toal

We attended test events at the following locations:

- Earls Court
- Eton Dorney
- Excel
- Greenwich Park
- Horse Guards Parade
- Hyde Park
- Hadleigh Farm
- Lee Valley White Water Centre
- Olympic Park Basketball Arena
- Olympic Park BMX track
- Olympic Park Handball Arena

Appendix 2 – Status of recommendations from previous reviews relating to the preparation for staging a sustainable Games

2007 Governance Review:

No.	Responsibility	Recommendation	Status
3.1	LOCOG	Develop a programme for minimisation and disposal of Games time waste in a manner that achieves the “zero landfill” objective and stimulates investment in facilities and jobs in East London.	<p>The main elements of LOCOG’s waste and resources strategy were published via the London 2012 Sustainability Plan (December 2009)</p> <p>LOCOG has plans in place to address Games-time waste and achieve the zero waste to landfill target and has appointed a waste contractor who has committed to these targets and is developing their plans to meet them.</p> <p>LOCOG has liaised with LWaRB regarding facilities in East London, there is a possibility that a new IVC plant in East London may be ready for Games-time but no AD facilities are likely to be in place in East London in time for the Games.</p> <p>Closed</p>
3.18	LOCOG	Produce plans for habitat and species management at other venues as part of the VEMP process.	<p>Sites are surveyed where appropriate, ranging from ecological walkovers to full detailed surveys depending on the nature of the location. This is determined in conjunction with the local Planning department, consultation with relevant bodies and by the determination of the likely impacts of the venue.</p> <p>LOCOG will produce Venue Environment Plans, which will either be adopted by the venue operators or incorporated into their Venue Operating Plans. These will include environmental components, including ecological impacts where relevant.</p> <p>Progress Made</p>

3.21	LOCOG ODA	Work with food suppliers as early as possible to ensure there is an adequate supply chain to meet the ambitions for healthy, local and sustainable food supply.	<p>Food suppliers were engaged as part of the development of the London 2012 Food Vision. Main caterers have been appointed and have committed to meeting the food vision baseline and elements of the aspirational standards, including providing healthy, local and sustainable food. There have been meet the buyer days and some caterers are already using new SME suppliers.</p> <p>Opportunities have been posted on CompeteFor to give food suppliers who meet the Food Vision the chance to become part of the Games-time supply chain.</p> <p>There are still some concerns about the supply and the demand post-Games but other organisations, including the GLA are now adopting the standards in the Food Vision, which will support a legacy demand.</p> <p>A draft London 2012 Food Vision for all has been developed.</p> <p>Progress Made</p> <p>The ODA produced a catering requirement brief. This set out minimum standards for the provision of catering services during the construction of the Olympic Park. It set food safety, sustainability and health standards for contractors via a food scorecard, which assessed performance in these areas and was used by contractors to improve their scores.</p> <p>Complete</p>
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3.23	LOCOG	Make plans for implementation of a Games-time LEZ available after the Beijing Games.	<p>Plans for a Games-time Low Emission Venues were published in the 3rd edition of the Sustainable Sourcing Code. For vehicles, this will just involve meeting the London LEZ in some cases. In other cases it may require vehicles to be of a higher standard, such as with minibuses (effectively Euro IV instead of III). It will also cover all vehicles, including cars which the London scheme has no plans to do. Enforcement is likely to be on age as a proxy for emissions standard to make enforcement easier.</p> <p>LOCOG are also working with their temporary generator supplier on new generators emissions controls that will meet exceed current emissions standards.</p> <p>Complete</p>
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2008 Design Review:

No.	Responsibility	Recommendation	Status
4	LOCOG	That the findings of the Carbon Footprinting and Carbon Management Strategy are applied to LOCOG's design processes to minimise the carbon footprint prior to procurement.	<p>The carbon footprinting works found that temporary materials form the biggest part of LOCOG's portion of the carbon footprint. This has led to a target to hire 85 per cent of their temporary venues and infrastructure. LOCOG is currently projecting that they will meet the target and hire 87 per cent. It has developed a temporary materials handbook to help address the issues where it is procuring materials. This will be used by designers. LOCOG has also produced a Venues Sustainability Strategy, including KPIs, a Health, Safety and Sustainability Standard and Sustainable Design Requirements (SDR). Venues/project teams are required to set out how they will implement the SDR.</p> <p>Complete</p>

13	All	<p>That there is clear integration of sustainability objectives into the early design stages for the remaining developments and ongoing projects of all the Key Stakeholders. This is in order to prevent the need to alter designs to build in sustainability criteria or retrofit at a later stage as this may lead to increased cost and consumption of resources.</p>	<p>This recommendation has been implemented by the ODA and by LOCOG.</p> <p>The OLPC has begun to apply it. There were initial concerns over their level of engagement with transformation issues when these were being managed by the ODA but these are starting to be resolved now that the OPLC is responsible for transformation.</p> <p>Other projects that weren't part of the original programme, for example the Orbit, were late to apply sustainability to their designs but have been subsequently required to meet the programme standards.</p> <p>Progress Made</p>
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Skills and Employment Review:

No.	Responsibility	Recommendation	Status
13	ODA LOCOG	<p>That the ODA and LOCOG clarify their own commitment to apprenticeships given the LEST target of 4,000 apprenticeships and provide an outline programme of how these opportunities are going to be delivered up to 2012.</p>	<p>The target of 4,000 is set for other public sector bodies across London and will be delivered and reported separately.</p> <p>The ODA committed to 2,250 training opportunities including work placements and apprentices. It has now offered in excess of 3,100 opportunities through the skills and training at the National Skills Academy for Construction.</p> <p>In January 2009 the ODA announced that it would be committing its contractors and supply-chain companies to securing 350 apprenticeships on the Olympic Park. There have now been over 400 apprentices experiencing work on the Park.</p>

			<p>LOCOG is committed to offering young people opportunities to gain new skills and experiences. Their contractors are working with colleges and local brokerages are identifying training needed to enable local people to access opportunities in contractor workforces.</p> <p>Progress Made</p>
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2008 Annual Review:

No.	Responsibility	Recommendation	Status
3	LOCOG	All users of the London 2012 Brand should be required to demonstrate how they will contribute to the London 2012 Sustainability Plan and relevant objectives.	<p>We have seen progress on this recommendation in some areas. For example LOCOG has produced Sustainable Event guidelines, which have been circulated to all organisations running events as part of London 2012. Commercial partners are required to sign up to the LOCOG Sustainable Sourcing Code.</p> <p>We have previously been critical of the level of preparedness within the GLA City Operations team with regard to the sustainability implications of the areas they are managing. During 2011 we are pleased to say that there has been significant progress made in this area, with dedicated resource being brought in from April 2011 to work through the issues and aim to secure certification to BS 8901. We recognise that they will not always be able to achieve exactly the same standard as LOCOG but we still expect to see appropriate commitments on waste, catering, the use of generators and the implementation of BS 8901.</p> <p>There continue to be other organisations associated with the Games that come to light where we believe this recommendation needs to apply, for example venues hosting training camps, local authorities running live sites and the Olympic Broadcast Service. All of these organisations should demonstrate how they will contribute to the sustainability of London 2012.</p> <p>Progress Made</p>

Carbon Review:

No.	Responsibility	Recommendation	Status
6	All CSL	Each individual Key Stakeholder should be responsible for reducing or avoiding emissions within their area of responsibility. The Commission for a Sustainable London 2012 has a responsibility to assure this activity.	<p>The ODA and LOCOG have demonstrated plans to tackle their carbon footprints where this is still possible. The ODA set targets for embodied carbon in their temporary venues (Basketball Arena, Shooting venue).</p> <p>The GLA (City Ops) are looking at ways of calculating and addressing the carbon emissions associated with their plans.</p> <p>It is not clear how this was applied to the Orbit.</p> <p>The OPLC is developing its sustainability plans for legacy and we expect carbon to be an important part of these.</p> <p>Progress Made</p>
8	All	The marginal carbon cost of decisions should be factored into operational decision making, taking into account life-cycle carbon impacts where possible and in a transparent and open manner.	<p>The carbon emissions associated with most projects are being considered and decisions are being taken that will reduce their carbon emissions. At times this will be due to specific consideration of carbon, at other times it will be associated with cost reduction and value engineering, or optimisation of technology and transport. Examples include low carbon concrete, hiring equipment to prevent the need for new items to be produced and the use of various biofuels. Plans are developing for this to be taken into account with City Operations. This was not demonstrably the case with the design of the Orbit.</p> <p>Progress Made</p>

Waste and Resource Management Review:

No.	Responsibility	Recommendation	Status
8	LOCOG	That LOCOG report on how materials under its direct control and influence are transported from venues during all phases of its Games operations and maximise the use of more sustainable transportation modes (e.g. low / zero emission road vehicles, rail and water).	<p>LOCOG logistics are reviewing their options for movement of materials. This includes some electric vehicles, use of biodiesel with over 50 per cent biofuel if sources can be found, new vehicle options that will significantly reduce emissions, possible use of barge for part transport to the Olympic park and possible use of rail to nationwide venues.</p> <p>Waste movements will be dependent on the waste contractor and are likely to all be by road.</p> <p>Progress Made</p>
9	GLA GOE	That City Operations teams, both in London and other locations around the country, set objectives for waste management that are consistent with those adopted by London 2012 and that particular emphasis be made on ensuring non LOCOG-controlled external venues fully meet these standards.	<p>GLA City Operations intend to have a zero waste to landfill target but there is not yet a recycling target for their Live Sites. The Commission is concerned that without a recycling target there will not be an incentive for the operator to increase recycling levels, other than an intent by the GLA to report the figures, since a zero waste to landfill target could be met through an energy from waste process. We recognise the challenges that the GLA face in procuring an operator for these sites whilst applying a range of requirements to them. We welcome the intent to achieve zero waste to landfill and urge the GLA to do all they can to maximise the recycling and composting from the sites.</p> <p>Progress Made</p> <p>It is still not clear how this will be coordinated outside venues, around race routes and for city operations in other cities, presenting a risk of variable standards being in place. We have made a new specific recommendation addressing this in the report.</p>

2009 Annual Review:

No.	Responsibility	Recommendation	Status
3	LOCOG	That LOCOG identify partner organisations with significant sustainability impacts and establish an engagement programme to ensure consistency.	<p>There are a range of organisations that are working with LOCOG to deliver the Games. These include many where there is not a traditional client - contractor relationship such as:</p> <p>Commercial Partners, the Olympic Broadcast Service (OBS), national broadcasting services, City Operations, training venues and local authorities. LOCOG is taking steps to address the sustainability impacts of these partner organisations through measures such as their sourcing code where there is a contractual relationship and guidance and liaison where there is not. Some issues remain to be resolved and the Commission will continue to monitor this.</p> <p>Progress Made</p>

Biodiversity Review:

No.	Responsibility	Recommendation	Status
4	LOCOG	That LOCOG makes clear how the process for post-Games restoration of sites will be assured and resourced following its dissolution.	<p>LOCOG are developing plans for restoring sites post-Games, as part of their mitigation and management plans. Where funding will be required after the dissolution of LOCOG, plans are in place for funds to be transferred to relevant organisations or held in trust for these purposes.</p> <p>Progress Made</p>

5	GLA	<p>That as part of developing plans to address the sustainability implications of all elements of City Operations, the GLA set out and implement clear plans for how they will ensure the ecology of all Live Sites under their control is appropriately managed and monitored, with mitigation plans developed and implemented where necessary.</p>	<p>We have previously been critical of the level of preparedness within the GLA City Operations team with regard to the sustainability implications of the areas they are managing. During 2011 we are pleased to say that there has been significant progress made in this area, with dedicated resource being brought in from April 2011 to work through the issues and aim to secure certification to BS 8901. We understand that the GLA believe that any risks in this area are relatively low and that Live Nation are addressing this through the planning process, which includes the submission of a biodiversity report & statement. We recommend that a mitigation plan be developed to deal with any unexpected issues that could arise during the Games and to remediate if required post-Games.</p> <p>Significant Risk</p>
7	LOCOG	<p>That LOCOG contract management processes include effective assurance at point of delivery to ensure that all timber and timber products adhere to their sustainable sourcing requirements.</p>	<p>As LOCOG has required that all timber and timber products will be FSC certified or will be expected to have an equivalent chain of custody it will benefit from having a document trail to be tracked and monitored. For products this is due to be done by the logistics team where it comes through their warehouses and also through site audits. For temporary venues and overlay this is due to be tracked by the principal contractor and through site audits by LOCOG. This can be a fairly resource intensive process and in order to minimise the risk of non compliant timber being used LOCOG will need to ensure that it has appropriate procedures in place to effectively track and assure the sustainability of all timber and timber products.</p> <p>Progress Made</p>

8	LOCOG	That LOCOG demonstrate how they will ensure that the flowers and medals can be used as symbols of sustainability at Games-time.	<p>Following discussion with LOCOG we are expect LOCOG to be able to demonstrate that the flowers will be symbols of sustainability at Games-time but cannot comment further for reasons of confidentiality.</p> <p>The metals for the medals will all have a full chain of custody, including ISO 14001 certification for mines and use of the Responsible Jewellery Council standards. The Commission understands that this is a first for the Games.</p> <p>Complete</p>
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