

# A Message from London to Tokyo in the Environmental Aspect of the Olympics

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London's approach to environmental management was embodied in the wider concept of Sustainability. This was a consistent theme throughout the London 2012 project from the earliest stages of bidding for the right to host the Olympic and Paralympic Games and all the way through planning, remediation, construction, operations, dissolution and transition to legacy mode. London 2012 achieved its sustainability goals by remaining true to its original vision, integrating sustainability into its management systems and procurement policies, and setting challenging targets that were continually monitored and independently assured. This approach provided a strong foundation for legacy. This applies across all the venues, infrastructure and greenspace originally built for the Games and has stimulated significant urban regeneration in East London, creating jobs and business growth. There is also a strong knowledge legacy through the influence of best practices, methodologies and standards. This is influencing future Games and the global events sector.

## Introduction

When I was still working for London 2012 it would have been difficult to write this paper. Back then the Games were still in front of us and priorities were inevitably centred on delivery. Now, as the excitement and fond memories of the Games recede, it is interesting to appreciate what we really achieved and to draw lessons from the successes as well as the missed opportunities.

Today cities throughout the world increasingly have to face up to the challenges of sustainability. As more and more of the world's population inhabits cities, public authorities have to juggle with the complexities of resource efficiency, resilience, mobility, environmental quality, social inclusion, economic development and the health and well-being of citizens.

The Olympic Games model is not the obvious starting place for tackling such challenges and it is important to be realistic about the extent to which hosting the Games can drive lasting positive change. Take air quality for example: this tends to be at least a regional level issue requiring coordinated policy initiatives across many levels of government. Staging the Games is not materially going to impact long-term air pollution levels in a city/region and it is disingenuous to claim otherwise. However,

the international profile of the Games, along with its strategic focus and immovable deadlines, is an excellent lever for accelerating necessary policy action and for upgrading infrastructure and systems, which might have long-term beneficial effects on air quality.

In such ways cities can benefit from the Games by bringing forward improvements that might otherwise have taken many years to accomplish and to do so in a more coordinated and cost-effective way. This role of enabling change is an important distinction from being expected to be responsible for delivering the changes. Confusion on this point is often at the root of controversies and arguments about the cost and benefits of the Games.

## London's approach

When London bid to host the 2012 Olympic and Paralympic Games, it made a radical proposal to the International Olympic Committee. It was not just about putting on the biggest sporting event in the world; the ambition was also to hold the world's first sustainable Olympic and Paralympic Games leaving a legacy far beyond the departure of the Olympic flame.

The aim was to have a lasting influence on the way people think and behave; a Games that would

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change lives. It was a chance to lead the way to show how, through sport, one can deliver lasting change in the way a neglected part of London could be transformed into a thriving community; in the way large scale construction projects are planned and built to respect local communities and the environment; in the way people manage events to include everyone and to make the best use of limited resources and change in the way the Olympic and Paralympic movements view sustainability.

This was not just about being green. The transformation of one of the most neglected polluted and deprived parts of the city meant creating housing and transport infrastructure and a new parkland that would bring real benefits to local people and the economy.

Beyond the physical changes there was an ambition to inspire everyone involved in the London 2012 project – from the architects and builders to the visitors and volunteers – to raise their own game, so that the impact could be even longer lasting. In this way the intention was for the legacy to reach far beyond the physical limits of the Olympic Park; it would also be about people and the way things are done.

To succeed meant establishing a shared vision; it meant signing up to comprehensive sustainability codes and putting stretching sustainability requirements into practice. London 2012's approach was very much built on the basis of partnership working. The organisers knew that the project had a finite lifespan but that the learnings could be adopted and taken forward by construction companies, corporate partners and suppliers across many sectors. This had the potential to influence the way they did business – not just for the Games but in the future too.

### **Key sustainability achievements**

The outstanding achievement of London 2012 has been the creation of the Queen Elizabeth Olympic Park, which is now (18 months after the end of the Games) fully reopened to the public and where all the new permanent structures have operators in place and working according to long-term business plans.

The transformation of this once derelict and badly polluted site has been achieved not just for the

Games but it continued seamlessly into the legacy phase without a change of pace or direction. Other significant progress includes:

- The transformation of the Athletes' Village into a new residential zone – the first residents move into their new homes in December 2013
- The removal of temporary structures:
  - Temporary seating stands removed from the Aquatics Centre to reveal the smaller permanent venue, which is open to the public for recreational swimming
  - Complete removal of whole temporary venues such as the Riverbank Arena (Hockey) , Water Polo venue and the Basketball Arena, with their component parts salvaged for reuse elsewhere
  - The on-going temporary utilisation of these cleared areas as event spaces until they are needed for future development (this spreads the construction load and the amount of homes put onto the market at one time)
  - The resizing of river bridges to be more in scale with the landscape and suitable for the day-to-day usage levels – instead of remaining oversized in their Games configuration
  - Extension of the parklands onto areas of former hard surfaces used as concourses during the Games
- Continued attraction of sporting and cultural events to the Park and its venues – this keeps a continual flow of activity and interest in the site
- Opening up the Park boundaries and linking into neighbouring communities – this breaks down the inevitable 'red-line' security boundary that was essential for the Games
- Continuation of pro-active employment and skills policies for local people that were originally established by London 2012

The Queen Elizabeth Olympic Park certainly fits the spirit of what London 2012 set out to achieve and with few exceptions it matches up well to the detail of the original legacy vision.

Without the Games, it is unlikely that the area would have been revitalised so effectively and in such a short time-scale. The Games enabled the assembly of a large area of land into a common ownership; the whole site was remediated; modern utilities and transport infrastructure were installed

and much of this is now enabling new businesses and other activities to be developed.

In place of a seriously blighted landscape with overhead power lines, derelict buildings and polluted land and watercourses, the site now includes over 100 hectares of accessible open space and ecological zones. The reprofiled river valley has achieved the triple benefit of providing important new open space amenity, a refuge for wildlife and flood alleviation for over 5,000 properties.

Another important legacy dimension of the London 2012 sustainability programme is the effect the Games had on changing sustainability practices within the event industry. This is harder to measure as it is more diffuse, but in terms of knowledge, methods and standards, London 2012 developed some important guidance documents and tools covering a range of topics such as: carbon footprinting, food, waste management, diversity, accessibility, sustainable event management and reporting.

The most significant of these is the new international standard ISO 20121, Sustainability Management Systems for Events. While it was designed within the timescale of London 2012, the intention was always to establish a management system standard that would be applicable to event organisations of all sizes and types across the world. ISO 20121 is now being applied in many countries (including Japan, Australia, Thailand, Denmark, France, Brazil and many others) and has become the global standard of choice for major sporting and cultural events. The Tokyo 2020 Organising Committee has committed to using the standard.

ISO 20121 is not just a badge. The application of the standard goes to the core of how an organisation is managed and able to meet its sustainability objectives and targets.

Procurement was one of the most important areas for achieving sustainability at London 2012. By stating our vision, policies and requirements in tender documents, it was possible to send a strong message to our suppliers (and sponsors) that we took sustainability seriously and we expected them to meet high standards in the goods and services they were supplying to us. Our procurement strategy was based on four key principles:

- **Responsible sourcing** – ensuring that products

and services are sourced and produced under a set of internationally acceptable environmental, social and ethical guidelines and standards.

- **Use of secondary materials** – maximising the use of materials with reused and recycled content, minimising packaging and designing products that can either be reused or recycled.
- **Minimising embodied impacts** – maximising resource and energy efficiency in the manufacturing and supply process in order to minimise environmental impacts.
- **Healthy materials** – ensuring that appropriate substances and materials are used in order to protect human health and the environment.

This was an important statement of leadership from London 2012 that applied across both the construction procurement and for staging the Games. It meant that for all major deals sustainability would be a central criterion. Within LOCOG the Head of Sustainability was included on a Director-level 'Deal Approval Group' that signed-off all major procurement, sponsorship and licensing deals. This innovative approach turned out to be an effective way of ensuring sustainability was in mind all the way through the decision-making process.

Elements of the London 2012 procurement system have been adopted by other organisations and projects, although not in a systematic way. The legacy in this respect is rather diffuse. One good example is the Rio 2016 Organising Committee, where the Procurement Department has built a robust system that has drawn heavily on London's experience.

All too often business leaders and decision makers hold back from embracing sustainability because they fear it will cost too much. London 2012 amply demonstrated this fear is groundless. LOCOG benefited by many tens of millions of pounds through its integrated approach to sustainability.

- Direct cost benefits from sustainability policies
  - Additional budget-relieving sponsorship revenue (ca GBP 25m)
  - Procurement savings (ca GBP 75m)
  - Resource efficiencies (energy, fuel, waste and asset disposal – ca GBP 20m)
- Indirect cost benefits
  - Risk management

- Reputation safeguarding and enhancement

On the construction side, substantial cost savings were made through the design process and procurement of materials, which also led to significant avoidance of carbon emissions. Across the entire London 2012 project, the actual carbon footprint was 25 per cent lower than the calculated reference footprint and this was mostly due to strategic choices of materials and processes, not the installation of green technology.

### Critical success factors

The key factors that enabled London 2012 to achieve its sustainability ambitions were:

- Consistent vision – we knew throughout why we were doing this
- Leadership commitment – creating an enabling environment for project delivery
- Early start – allowing us to build a culture of sustainability across the programme
- Dedicated in-house sustainability team – internal expertise integrated into the programme
- Sustainability management system – a structured way of working based on sustainability principles
- Stakeholder engagement and partnership working – enabling external people and organisations to contribute and be involved
- Independent assurance – an external body kept track of our progress and published performance reports

It is important to understand that in a fast-moving, complex project like the Olympic and Paralympic Games, sustainability has very few rules. There is no fixed way to do this; it is not a one-size-fits-all approach. The critical point is to be in a position to be able to influence choices and make informed decisions.

Strategic planning and project governance are therefore vital elements. If these are correct, most of the technical requirements will fall into place.

### Lessons learned

No two editions of the Games are the same. Each city will have its own character and perspective.

However, it is important to be open to learning from previous host cities and in turn to share your own experience and knowledge.

Based on our experience in London, I put forward the following five main lessons.

1. Need for alignment with long-term vision for city/regional development: Understand how the Games can help accelerate regeneration and modernisation of key areas of a city/region. This is the opportunity to secure long-term benefits and make the Games work for the city.
2. The debate between permanent vs temporary venues: The key point is the need for 'flexible' design and operation of venues and supporting services. Over-sized permanent structures are the worst outcomes, but temporary, one-off structures can also be very wasteful. Emphasis should be on designing for future needs and working back to see how the Games can bring this about. This may lead to some venues being a hybrid of permanent and temporary elements. It will certainly require creative and flexible thinking.
3. Consistent messaging, leadership and engagement: It is essential to keep stakeholders on board and enthusiastic, and to present a credible and transparent approach. Serious leadership commitment must be visible and enabling. Over a seven-year programme this is very hard to maintain and requires continual, intensive effort. Many issues and problems will arise and mistakes will be made. These must be faced openly and transparently – a culture of secrecy to avoid short-term embarrassments will ultimately damage the project.
4. Much of the legacy value is unseen or unrecognised: Too often people equate legacy just with the fate of the sporting venues and development of sporting activity and success across the host nation. Important as these are, they do not represent the whole picture. Other – often hidden – benefits include new/upgraded infrastructure (i.e. telecoms, energy, waste management and transport links), accessibility improvements, green spaces and ecological

zones, new amenities and services. These are the foundation for much of the economic growth and social progress following on from the Games. Additionally there is the 'soft' legacy of new systems, processes, standards and skills that can be rolled out across other sectors and internationally.

#### 5. Profiting from the knowledge and skills legacy:

It is vital to ensure the knowledge legacy is fully captured and effectively utilised. This requires advance planning and establishment of effective governance and institutional structures well before the Games are completed. London did well to initiate the Legacy Corporation for the Olympic Park three years before the Games but it failed to create anything comparable for managing the 'soft' legacy.

### Conclusion

Hosting the Olympic and Paralympic Games is a major challenge for any modern city. The Games can bring many important benefits but these do not happen in isolation. To achieve sustainable outcomes it is essential to address five main needs:

1. Ensure the project is compatible with long-term plans and not skewed by short-term, event-specific requirements
2. Embed sustainability and legacy thinking at the earliest stages of the project and be open to innovative and flexible solutions
3. Reinforce the commitment through clear leadership, communications and engagement
4. Sustainability is as much about the 'hidden wiring' of systems, processes and standards, as it is about physical structures, equipment and green technology
5. Governance of the project must also include institutional structures suitable for the post-Games phase

Good luck Tokyo 2020!

### Acknowledgements

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### 《Further reading》

All London 2012 sustainability reports, strategies and case studies are electronically stored and freely available on the Learning Legacy website: <http://learninglegacy.independent.gov.uk/index.php>

Many of these documents are also available on the International Olympic Committee's Games Sustainability Compass, See: <http://extrassets.olympic.org/OGKM/2013/Sustainability/index.html>

The primary source documents relevant to this paper are:

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