

Regeneration and the role of the London 2012 Olympic and Paralympic Games

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Abstract With London about to host the world's nations in a bacchanalian celebration of sport, 'Brit' power, brand, and all things Olympic, it is perhaps easy to be distracted from the Games' more sober legacy. The Commission for a Sustainable London 2012 — the body tasked with independently assuring the sustainability of the 2012 programme and legacy — has taken a detailed look at what London will be left with once the party is over. The question on everyone's lips is whether the 2012 programme will have fulfilled its key objective to transform East London. The authors shed light on progress and the Commission's proposal for the Lea Valley to 2042.¹ They highlight that the physical legacy is second-to-none and the socio-economic gains to date are also ground-breaking for an Olympic Games. However, several key objectives have missed the mark, including waste infrastructure and renewable energy, and on sports participation. The authors point out that making a difference in the longer term requires optimising the significant opportunity that the project has provided to extend the social, environmental and economic regeneration throughout the length of the Lea Valley, drawing on deep, sustainable city-systems approaches.

Keywords: *London 2012, regeneration, sustainable, city-systems, Lea Valley, East London, waste, renewable, sports, health, employment*

ALL EYES ON LEGACY

With London about to host the world's nations in a bacchanalian celebration of sport, 'Brit' power, brand, and all things Olympic, it is perhaps easy to be distracted from the Games' more sober legacy. The Commission for a Sustainable London 2012, the body tasked with independently

assuring the sustainability of the 2012 programme and legacy, has just taken a detailed look at what London will be left with once the party is over. The challenges go way beyond physical regeneration: in 1889, when Charles Booth completed the first comprehensive survey of relative poverty² East London was home to some

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of the most disadvantaged communities in the entire city. In 2012, not much has changed. The question on everyone's lips is whether the 2012 programme will have fulfilled its key objective to transform East London. The authors of this paper shed light on progress and the Commission's proposal for the Lea Valley to 2042.³

THE LEGACY COMMITMENT – THE CHALLENGE

'It's not deliverable' were the first thoughts of many who, upon hearing that London had won the bid to host the 2012 Games, had to turn their hands to meeting the extraordinary commitments that the UK's politicians had boldly made in the run-up to that fateful day in 2005.

How could London define, let alone achieve such sweeping goals as:

- 'Regenerating East London communities and their environment';⁴
- 'The regeneration of an entire community for the benefit of everyone who lives there';⁵
- the Olympic Park 'acting as a catalyst for profound social and economic change';⁶
- or the resulting improvements delivering 'a fitter society and reducing health inequalities'.⁷

London's commitments included wide-ranging social, economic and environmental goals, which, if delivered, would be world-leading not just for an Olympic and Paralympic Games, but also for city regeneration projects. The bid posed a vision-splendid: full of dynamic language like 'transformation' and 'catalyse'; a bold new vision for a part of London everyone recognised deserved to be lifted out of poverty and disadvantage.

Yet the challenges seemed almost insurmountable. In 2006, work was being carried out on the relative health

inequalities for East-End communities. The Jubilee Line tube map served as a powerful visual reminder of the drop in average life expectancy of one year for every second tube station further east from Westminster to Canning Town, and has been recently updated by the London Health Observatory.⁸ Employment rates were disproportionately lower too, and the quality of the built environment was starkly divided between new development and the old East End.⁹

Stakeholders, including the London Sustainable Development Commission,¹⁰ BioRegional and WWF,¹¹ the London Health Commission¹² and the prototype of this Commission (CSL),¹³ worked hard publicly and behind the scenes to impress upon the small but hardy group of 2012 officials that these were unassailable unless a truly joined-up strategy could be found. Health inequalities would worsen unless the vision for improvements in physical activity was linked to enhancements of the natural and built environment, better education and work opportunities, and safer, friendlier neighbourhoods. The host boroughs of London (then five and now six) were also desperate to align their own objectives with that of the programme, and they reached an extraordinary agreement to speak with one voice as much as possible, funding an operational unit to engage with the programme on their collective behalves. On top of all of this, the international community had realised that the so-called 'tipping point' at which the Earth could endure runaway climate change was potentially frighteningly near: in this new era of global awareness, what business did London have in running up a huge carbon tab on the global commons?

The London 2012 Sustainability Policy,¹⁴ developed in 2006 and signed by the Olympic Board in 2007, attempted to respond and capture some of this thinking while also providing what Games officials

were hoping would be a pragmatic approach to delivery, setting out five unambiguous themes against which the programme would be measured (climate change, waste, biodiversity, inclusion and healthy living). It was followed swiftly by a suite of legacy statements from the Mayor¹⁵ and central government,¹⁶ which drove subsequent programme development and delivery. The Olympic Delivery Authority's Sustainable Development Strategy¹⁷ was the first substantive dive into the detail for 2012 programme partners — setting 12 objectives and targets in what is still considered today a ground-breaking roadmap for major projects.

The boroughs, meanwhile, had embarked on their own ambitious approach to regeneration, finally delivering the Strategic Regeneration Framework⁹ (SRF) in 2009 with its likewise ground-breaking concept of socio-economic convergence of the East and 'the rest'. Setting out a bold strategy, which recognised that physical regeneration by itself would deliver little for existing communities, the SRF acknowledged that genuinely improving the life chances of people living in the East required a carefully crafted approach to both physical and socio-economic regeneration: one that would not shut out more wealthy newcomers, but that would not simply act as a gentrification lever either. Importantly, it was founded on the belief that combating relative poverty and disadvantage was critical if East London communities were truly to be on a level playing field with wider London — long-term jobs for the existing community are at the heart of this ambition.

ACHIEVEMENTS

In the eyes of design professionals, it is perhaps hugely gauche to say — but

nevertheless true — that in 2012, the physical regeneration of Olympic Park looks very much like the CGI vision generated in 2005 (despite many iterations and revisions to the masterplan). Whether this is positive or not is perhaps for others to decide, but one thing is for certain: the Olympic Park is a triumph of ecological planning, landscaping, and delivery to expectation and yes, to budget. Its venues have all been delivered in time and to very high sustainability standards. A combined cooling, heating and power plant will meet all heating needs in legacy mode with considerable carbon savings. A pilot waste-water recycling plant will test the efficacy of extracting non-potable water from the sewer, treating it and supplying it into the non-potable network. Walking and cycling paths will criss-cross the Park, and the Village is one of the first large-scale Code for Sustainable Homes Code 4 developments to be completed, with affordable housing well integrated into the design of the complex. As well, over 45 hectares of new biodiverse habitat have been created on fully remediated land.

Into legacy, five new neighbourhoods will be delivered, linking to existing nearby neighbourhoods and providing enhanced facilities for new and existing communities. The Park itself will host a wide range of activity, and the special-purpose vehicle established to oversee its success, the London Legacy Development Corporation (LLDC), is focused on ensuring it does not become yet another white elephant littering the landscape of Olympics past; but instead a vibrant place with real access for local communities as well as top-line sporting and cultural events.

Stratford has been mooted as the future new centre of London as the economic and population gravity edges away from the west. It is certainly true that Stratford, with more than ten substantial transport

links, a major new shopping precinct, and extensive commercial development platforms still to be initiated, has the potential to rival most other centres in London. It is worth noting that the cohesion of development and transport links that has already been delivered could not have been achieved in time for the Games without the decision by Westfield to bring forward its development timeframe to align with the 2012 programme. It shows that cooperation is required to get shifts of this scale within the city fabric.

Along with this glittering future, hard work has been put in by the Olympic Delivery Authority (ODA), the London Organising Committee of the Olympic and Paralympic Games (LOCOG), the boroughs and major commercial operators Westfield and its tenants to provide real, sustainable jobs linked to appropriate training. The skills and employment programmes are expected to have delivered in excess of 60,000 jobs for East London, far in excess of the 21,000 promised under the bid, but slightly less than the 70,000 proposed by programme partners once the employment and skills programme had got up and running. This is an excellent achievement in the context of the economic downturn. How many of these would be long-term or local is always difficult to determine. In the review of skills and employment, it was argued that for a job to be truly sustainable, it needed to benefit the individual as well as the wider community and the environment, and we were pleased to see that the London Employment and Skills Taskforce adopted this definition in their 2012 plan. It has not been possible to assess the employment outcomes against this high bar, but the wider academic community was challenged to consider how this could be measured:

'A sustainable job is one that improves an

individual's life chances and benefits the community – environmentally, socially, and economically.'¹⁸

The 2012 programme partners have also broken a few world records by setting new standards in sustainable food, waste, packaging, and in embedding sustainability into procurement *per se*, as well as driving the new British standard in sustainable events management, BS8901.¹⁹ LLDC's commitment to carry forward much of this work and to improve upon it has been very encouraging. There is no doubt that innovation right through the programme has continued, and so (to return to employment), the ODA's job brokerage programme was improved upon by LOCOG and the boroughs, and LLDC intends to continue to innovate.

The Park itself is being seen by LLDC as a jewel in the crown of East London, but not the limit to which the bounty is shared. The organisation has been encouraged to think closely about the interim use strategy. Few development sites see such an extensive opportunity to make temporary use of land over such a long timeframe. We have supported bold consideration of all sorts of ways in which the strategy could contribute to community life in a sustainable way, including food production activities not just confined to allotments and community gardens, and in providing opportunities for small to medium-sized and start-up businesses.

MISSING THE MARK

There is no doubt that many elements of the vision for a sustainable Games have been well delivered, and all those involved can be proud of their achievements. However, it is often more valuable to learn from those things that went less well. The objective to 'act as a catalyst for new sustainable waste management

infrastructure' has not been achieved. Uncertainty over grant funding, a risk-averse industry, recession, credit crunch, land-use and technical constraints combined to sink the vision of sustainable, organic waste-disposal infrastructure creating biogas that could be used to power the combined cooling, heat and power facility in the Olympic Park energy centre. There are a variety of good excuses for this failure, and every organisation involved can conveniently claim the balance of responsibility lies with others. Could this have been achieved with determined leadership, political will and greater coordination between private and public sectors? Probably.

The failure to deliver a waste-to-gas solution meant the ODA had to put all its eggs in the wind turbine basket with respect to the objective to deliver 20 per cent renewable energy on the park. Once again, a variety of circumstances caused the cancellation of the wind turbine — less wind than expected, recession, credit crunch, and new health and safety rules. With these options exhausted, the ODA delivered its carbon objectives through donations to the Mayor's RE:NEW and RE:FIT²⁰ funds to implement energy efficiency solutions in local schools and communities. While commendable, this leaves the Olympic Park achieving only 41 per cent savings in carbon emissions against a target of 50 per cent. With the rest of the target met through offsets in local communities however, the ODA has managed to achieve the equivalent of a 58 per cent total reduction in programme carbon. The underachievement on-park remains a big challenge for the legacy company, even though the legacy for surrounding communities is more positive than first planned.

There is no compelling evidence to suggest that having the Games in a country increases levels of sport participation among the population. It was

therefore perhaps unwise to promise to deliver a substantial increase in the number of people participating in sport. Attempts by Sport England to incentivise sport governing bodies to increase participation remain to be proven and the recent reform of funding for school sports has not helped. In London, the Mayor's team has engaged with community groups around sport with some success, but nationally the picture looks less positive. London 2012 is unlikely to leave a legacy of a healthier nation inspired to take up sport, and government needs to rethink the approach, possibly based on the community engagement model developed by the Mayor's office.

WILL IT MAKE A DIFFERENCE?

The challenges remaining in East London are those familiar to many cities around the world. The unique features of London are an overlay on what is essentially a city problem: highly centralised infrastructure designed along principles founded in the 18th and 19th centuries and fundamentally not fit for purpose when considering the challenges of the future. In sustainability terms, the iterative nature of city-shaping is simply not fast or fulsome enough to prepare us for the bleak future that is approaching.

It is salutary to think that the world's attention will be focused in Rio a mere month before attention switches to London in July this year. At the Rio +20 Earth Summit 2012, we will collectively wring our hands about our capacity to act quickly enough to avoid runaway climate change, and to combat its associated and interdependent ills: water and food scarcity; explosion in communicable diseases; increasingly extreme weather events and large-scale natural disasters; environmentally displaced communities; and almost certainly an increase in deaths and illness from these impacts. In London,

we will be enjoying the world's biggest sporting party. The two events could not be further apart from one another geopolitically, yet they are linked, ironically, by Rio's inheritance of the Olympic flame in 2016.

But need this be so ironic? The work of the 2012 partners in transforming parts of East London is arguably unparalleled. The convergence agenda that was initiated by the Boroughs and is now wholeheartedly embraced by the Mayor, will, if successful, transform the East's socio-economic future. But what it does not necessarily encompass are the structural changes that will be necessary within the fabric of the city itself to enable London, and East London, to remain competitive and resilient in this harsher environmental future. It is here that the very successes of the physical regeneration of Olympic Park can act as a catalyst for designing and implementing a systems-based approach to deep sustainability gains from the Thames right to the M25, using the Lea's ecological system as its anchor.

Industrial ecology (or industrial symbiosis), closed-loop resource planning, closely linked with technological advancements, behaviour change and with a constant thread of innovation, could deliver the kinds of intervention that every major city will need to embrace well before the end of this century — true zero-carbon cities, highly water- and resource-efficient industry and residential development, super-smart transport and infrastructure, urban production of much of what is needed to keep a city going, such as food, remanufactured product, and a widespread but small-scale manufacturing and creative development (see, for example, recent work by the Ellen Macarthur Foundation²¹). This kind of transformation could deliver a boom in green-collar jobs resulting in sustained employment opportunities as well as offering the kinds of improvement to the

natural environment that have already been achieved in the Olympic Park.

Our review of legacy has, as its centrepiece, two recommendations which it is thought will help East London prepare for this future: bringing East London organisations together and forming a 'community of practice' to formulate a critical path for wider legacy objectives; and for this body to coordinate the development of a 30-year future-proofing strategy for the Lea Valley to remove the roadblocks and capture the opportunities for a single, sustainable urban green infrastructure system.

This kind of planning is mightily hard to coordinate, let alone deliver, and we have suggested that the All-Party Parliamentary Group for East London initiate the community of practice.

WIDER LEGACY FOR FUTURE GAMES

We have always maintained that there is no such thing as a sustainable Games. Excessive use of resources, disrupting communities, and people travelling across the world just to play or watch sport is a fundamentally unsustainable thing to do. However, if there can be a lasting Olympic effect on the way business sectors, government and individuals behave, and if this change is more sustainable, then it can be considered that we are getting closer to the vision of the 'sustainable Games'. There is evidence emerging from some sectors. There is no doubt the construction industry has changed for the better. Contractors are differentiating themselves on sustainability, based on their experience, and winning new work. Sustainability standards proposed for the Barangaroo development in Sydney could shortly make the London 2012 levels of sustainable construction look a bit jaded. The next big project in London, Crossrail, has adopted most of the ODA

sustainability objectives and raised the bar in many areas. Of particular note is the approach to skills and employment: an uninterrupted stream of opportunity for young people to train in modern construction skills and have good job opportunities, which will continue from 2006 through to 2018 as a result of the combined efforts of the ODA and Crossrail.

Government generally has been slow to adopt the ODA philosophy fully, but some progress has been made. The way in which LOCOG has addressed the ambition to send no waste to landfill from the Games, combined with the sustainable food vision, should change the way major events cater for visitors and dispose of their waste. Time will tell if this becomes a reality but LOCOG has set the standard. The involvement of commercial businesses has produced a predictable mixed reaction. Assuming Olympic and Paralympic Games continue to be held, unless taxpayers are prepared to foot the bill, or ticket holders are prepared to pay substantially more, corporate sponsorship and sales of merchandise are here to stay. It had been hoped that London 2012 merchandise would be different, giving the public a clear message in the way the excellent gift shop at the Eden Project does. Sadly, this is not to be. The same old stuff that nobody needs is on sale, slightly more sustainably sourced and with better packaging, but still the same old stuff.

Major events, construction and infrastructure projects will have much to learn about the London 2012 sustainable Games. If organisations can improve on things that went well, and learn from things that went less well, the world will be a more sustainable place. Only then will we be able to look back and call London 2012 sustainable. If cities can look to London for evidence that Games can positively transform neighbourhoods and the infrastructure upon which they rely,

then we can also call London's 2012 legacy a lasting success.

References

1. Commission for a Sustainable London 2012 (2012), 'Assuring a Legacy — Promises, Progress and Potential', March, available at: <http://www.cslondon.org/publications//?category=1&did=95> (last accessed 4th April, 2012).
2. Booth, C. (1889–91), 'Labour and Life of the People', London; Amhad, S. (1999), 'Charles Booth's 1889 Descriptive Map of London Poverty', available at: <http://www.umich.edu/~risotto/home.html> (last accessed 4th April, 2012).
3. Commission for a Sustainable London (2012), 'Assuring a Legacy — Promises, Progress and Potential', March, available at: <http://www.cslondon.org/publications//?category=1&did=95> (last accessed 4th April, 2012).
4. London 2012 Candidature File Vol. I, Theme 1. p. 16.
5. London 2012 Candidature File Vol. I, Theme 1. p. 19.
6. London 2012 Candidature File Vol. I, Theme 1. p. 19.
7. London 2012 Candidature File Vol. I, Theme 1. p. 19.
8. London Health Observatory (2010), 'Jubilee line of health inequality', available at: <http://www.lho.org.uk/Download/Public/15463/1/D-Tube%20Map%20on%20LE%202004-08.ppt> (last accessed 4th April, 2012).
9. Host boroughs (2009), 'Convergence (kuhn-ver-juhns) n: Strategic Regeneration Framework. An Olympic legacy for the host boroughs', November.
10. London Sustainable Development Commission (2005), Commission minutes 20th March, 2006, available at: <http://www.londonsdc.org/documents/Minutes/lsc-min200306.rtf> (last accessed 4th April, 2012).
11. BioRegional/WWF (2005), 'Towards a One Planet Olympics', available at: assets.panda.org/downloads/opl_olympics_brochure.pdf (last accessed 23rd April, 2012).
12. London Health Commission and London Development Agency (2004), 'Rapid Health Impact Assessment of the Proposed London Olympic Games and Their Legacy', ERM, available at: www.apho.org.uk/resource/view.aspx?RID=61057 (last accessed 4th April, 2012).
13. Commission for a Sustainable London 2012 (2007) 'Assuring a Legacy', February, available at: <http://www.cslondon.org/wp-content/uploads/downloads> (last accessed 4th April 2012).
14. London 2012 Sustainability Policy London 2012 (2006).
15. Mayor of London (2007), 'Five Legacy

- Commitments', Greater London Authority, London.
16. Department of Culture, Media and Sport (2008), 'Before, During and After: making the most of the London 2012 Games', DCMS, London.
 17. Olympic Delivery Authority(2007), 'Sustainable Development Strategy', ODA, London.
 18. Commission for a Sustainable London 2012 (2009) 'A clear run to employment ... A Review of Skills, Employment and Business Capacity (Towards social and economic sustainability)', p. 43, January, available at: <http://www.cslondon.org/publications/?category=1&did=11> (last accessed 4th April, 2012).
 19. Commission for a Sustainable London 2012 (2012), 'Assuring a Legacy — Promises, Progress and Potential', pp. 53–54, March, available at: <http://www.cslondon.org/publications//?category=1&did=95> (last accessed 4th April 2012).
 20. Mayor's RE:NEW Fund, available at: <http://www.london.gov.uk/who-runs-london/mayor/publication/climate-change-mitigation-energy-strategy> (last accessed 10th April, 2012).
 21. Ellen Macarthur Foundation (2012) 'Towards the Circular Economy. Economic and business rationale for an accelerated transition', available at: <http://www.thecirculareconomy.org/> (last accessed 4th April, 2012).