

Eric Hughes Award for

OUTSTANDING CONTRIBUTION TO IMPROVING SUSTAINABILITY IN CIVIL ENGINEERING



Olympic Park, London

Summer 2012 saw the largest international sporting event take place in our back garden. With the whole world looking at London, the 2012 Olympic & Paralympic Games had to impress... and they did outstandingly.

Any Olympic Games have the power to bring together the aspirations of the finest athletes on earth and the efforts of hundreds of thousands of individuals who create the stage for their performances. It has the power to revitalise communities and shoulder the hopes and dreams of billions of people around the world who watched with bated breath.

Record breaking on and off the track, the organisers designed and constructed the most sustainable Olympic and Paralympic facilities ever built, on time and budget and to high sustainability standards. The Olympic Park is the largest new urban parkland in Europe for 150 years and more than 60% of construction materials were brought to the site by rail or river to build it. The Olympic Park is a 2.5 square-km site featuring a number of waterways and links to surrounding areas via highway, cycleway and rail networks.

The London Organising Committee for the 2012 Olympic & Paralympic Games (LOCOG) and the Olympic Delivery Authority (ODA) were awarded the first ever Eric Hughes Award for their Outstanding Contribution to Improving Sustainability in Civil Engineering at CEEQUAL's 2013 Outstanding Achievement Awards.



Chairman of the Olympic Delivery Authority, Sir John Armitt CBE (centre-left) and James Bulley, Director of Venues and Infrastructure for London 2012, and Chairman of the Olympic Delivery Authority (centre-right), being presented with the Eric Hughes Award for 'Outstanding Contribution to Improving Sustainability in Civil Engineering' at the 2013 CEEQUAL OAs held at the ICE, London on 11 March 2013.

[Left: Paul Jowitt (Chairman of the 2013 OAA Judging Panel) | Right: Eric Hughes (CEEQUAL Chairman 2006-2013)]

Chairman of the ODA, Sir John Armitt and Director of Venues and Infrastructure for London 2012, James Bulley were present to accept the award.

Sir John expressed his gratitude: "It is very good for the industry and profession to have challenging tools like CEEQUAL available to us to test out and measure our performance. So in addition to being very proud of the Authority's role in delivering the Organising Committee's sustainability vision, and of all the design and construction teams we hired, I also want to thank CEEQUAL for all its work in developing the assessment scheme for the use and benefit of civil engineering and society."

Mr Bulley added: "It was a real honour and a privilege to receive the award on behalf of LOCOG and we are very proud and pleased to be recognised in this way."

Under a contract from the Olympic Delivery Authority (ODA), all of the civil engineering, landscaping and public realm works at the Olympic Park were assessed and verified using CEEQUAL in 17 separate package assessments, all achieving 'Excellent' rated awards. These individual assessments included the Enabling Works (North & South Areas), the Landscaping and Public Realm

in the South and North Parks, the District Heating and Cooling Network, Overbridges and Stadium Bridges, and the Primary Foul Sewer and Pumping Station. The scores from the individual assessments were aggregated on a construction-value weighted basis, giving an overall weighted 'Excellent' CEEQUAL score of 93.8%. Further to this, two of the 17 Olympic Park projects achieved the highest ever scores [to date] of 98.3% for a CEEQUAL Assessment: Olympic Park North Park Structures, Bridges and Highways (SBH Lot 1) and Olympic Park Wetland Area Bridges.

Paul Jowitt, Chairman of the 2013 OAA Judging Panel, described the Park: "The Olympic Park demonstrates



the transformational power of civil engineering to act as an agent of change and provide the underpinning infrastructure on which civilisation depends, lifting both body and spirit to new heights. London 2012 showed the world that the Olympics and Paralympics were a triumph not just for sport, but a triumph for civil engineering."

London 2012 was the first Summer Olympic and Paralympic Games to measure its carbon footprint over the entire project term. By using the outcomes of the footprinting assessment to inform decision-making, the ODA radically improved their ability to avoid, reduce and substitute carbon emissions associated with delivering the Games. This is just one example of how the 2012 ODA reached an outstandingly high level of sustainability improvement.

By using independent sustainability assessment tools like CEEQUAL, project teams can change their ethos and, ultimately, improve their decision-making when planning and executing projects and maintenance works. Such tools can open their eyes to the wider repercussions that may



ODA receiving one of their many CEEQUAL Awards

be caused – such as the remote environmental and social impacts of winning the materials we use from the planet – which ultimately can also have significant economic benefits in the long as well as the short term. Managed effectively, civil engineering has every opportunity to provide a sustainable legacy in the ability of humanity to deliver development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

As work packages within the Park have been completed, the Olympic Delivery Authority and their consultants and contractors have received a total of eight CEEQUAL Outstanding Achievement Awards, earned 17 'Excellent' rated CEEQUAL Assessments and, in the opinion of this year's independent Judging Panel, are deserved winners of the first ever Eric Hughes Award for Outstanding Contribution to Improving Sustainability in Civil Engineering. We hope Rio can keep up the standards set by London 2012.

Sam Edwards CEEQUAL | 020 3137 2379



[Source: EG Focus]

OUTSTANDING ACHIEVEMENTS:

- Creation of the Park involved **2.8 million UK construction professionals** & provide **over 4,000 long-term jobs** in the new centre for technology, design and research
- **Over 4 million visitors** went to the Park during the Olympic and Paralympic Games, and the economic activity they generated was a **noticeable increase in GDP** during the summer
- After legacy works, a **further projected 800,000 visitors** are anticipated to use the swimming centre each year
- An **estimated 8,000 new homes (5 new neighbourhoods)** will be built by 2014 within the Park. Additional to the new homes, **12 new schools and nurseries, 3 health centres** and a **new library** will also be built
- The potential for healthier life styles for residents and local communities with **over 35km of new pathways and cycle paths**, and an equivalent of **357 football pitches worth of open parks/landscape**
- The creation of the Olympic Park triggered the **clean-up of 2 million tonnes of heavily contaminated earth**. Likewise, with the complete regeneration of the River Lea through the Park, coupled to **extensive and environmentally sensitive landscaping**
- Legacy works will ensure that **6.5km of waterways will be monitored and maintained** within the park
- Wildlife will be further enhanced beyond what was achieved for the Olympic Games through **installation of habitats: frog ponds, kingfisher walls, bat roosts, otter holts and wild flower planting**
- Use of **implemented low energy features** throughout the Park site, such as LED lighting, photocell switches and **efficient fixtures and fittings for irrigation system**
- Additional to this, the original design of the Park **incorporates lighting columns with wind turbines and Photovoltaic cells** which allow renewable energy to be exported to the grid