Editorial

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It would be difficult to look back at 2012 and not mention the Olympics (Figure 1) a huge project which delivered immediate benefits in sustainability terms: environmental clean-up, renewal of a socially-deprived area, delivered within budget and, as announced by the Office for National Statistics on 25th October, delivering an upturn to the UK economy (ONS, 2012). In their briefing paper in the June issue of *Engineering Sustainability*, Vicat and Rooney (2012) provided a highly stimulating overview of the process behind the delivery of the London 2012 Olympic Park transport and environmental management schemes. Of course the success of the legacy is yet to be proven and I hope that this will provide a source for briefings and papers to *Engineering Sustainability* in the future.

The December 2012 issue of the journal reinforces some of the themes which have emerged from this year's papers. Firstly, the importance of human factors has come very strongly to the fore. AlWaer and Kirk (2012) wrestle with combining qualitative data within an objective assessment of building sustainability, trying to include a factor which encapsulates 'well-being'. This theme was also raised by, among others, Simm (2012) in the September issue.

Complexity and the use of a systems-based approach to sustainability is picked up by Fink and Stulz (2012) who report on a Swiss approach to sustainability in the building sector which includes assessment of energy: embodied in materials; used in construction and operation of the building; and used in supporting the mobility requirements of occupants. Baker *et al.* (2012) examine the use of resource flows as a means of breaking down a complex 'system of systems' in order to design sustainable (reduced energy and water footprint) and interdependent infrastructure.

The importance of time as a dimension of sustainability is brought out in this issue by Ng *et al.* (2012) in their review of methods available internationally for full life-cycle assessment of buildings, from planning and design through to dismantling and disposal. Time was also a theme within the March issue of the journal with papers examining whether a particular development can be 'proofed' against a range of very different potential futures. This themed issue also demonstrated the importance of place as a dimension of sustainability in its use of one particular site to develop and illustrate this novel methodology.

The importance of place, time, human factors and the need to take a systems-based approach are all important considerations in the briefing by Campen (2012) of the Peak District National Park Authority. Campen describes how peatlands provide an important ecosystem service – acting as a combined carbon sink, conservator of biodiversity and manager of flood risk. Erosion caused by grazing, burning and drainage is reducing their capacity to perform these functions. The paper demonstrates how restoration of peatlands can be extremely cost effective when considered in carbon reduction accounting terms.

Looking forward to 2013, these themes will be developed further in two planned themed issues. The first, participatory planning, will include papers and briefings on multi-dimensional decision making in sustainable development in the built environment. The second themed issue will comprise papers invited from presenters at the highly successful Earth Systems Engineering Conference, held at Newcastle University in July 2012.

Engineering Sustainability has had a very successful 2012 with an increase in impact factor (two-year impact factor 0.587) as well as the numbers of papers we receive. As a result, the journal will be increasing in frequency from four to six issues for 2013. Coupled with the introduction of 'ahead of print'

Figure 1. Sustainability was key to the success of the Olympic Park project in 2012 with environmental clean-up an immediate benefit (copyright London 2012)

(AoP) publication where papers are published online in advance of the printed issue, we anticipate further successes in 2013.

REFERENCES

- AlWaer H and Kirk D (2012) Building sustainability assessment methods. *Proceedings of the Institution of Civil Engineers – Engineering Sustainability* **165(4)**: 241–253, <http://dx.doi.org/10.1680/ensu.10.00058>.
- Baker H, Clarke B, Owen A and Unsworth R (2012) Achieving sustainable resource networks. *Proceedings of the Institution of Civil Engineers – Engineering Sustainability* **165(4)**: 261–279, <http://dx.doi.org/10.1680/ensu.11.00004>.
- Campen R (2012) Briefing: The importance of carbon in the conservation of peatlands. *Proceedings of the Institution of Civil Engineers – Engineering Sustainability* **165(4)**: 237–240, <http://dx.doi.org/10.1680/ensu.10.00053>.
- Fink AM and Stulz RJ (2012) 2000 W society: a sustainable energy vision for the future. *Proceedings of the Institution of Civil Engineers – Engineering Sustainability* **165(4)**: 255–260, <http://dx.doi.org/10.1680/ensu.10.00059>.
- Ng ST, Wong JMW, Skitmore S and Veronika A (2012) Carbon dioxide reduction in the building life cycle: a critical review. *Proceedings of the Institution of Civil Engineers – Engineering Sustainability* **165(4)**: 281–292, <http://dx.doi.org/10.1680/ensu.11.00005>.
- ONS (Office for National Statistics) (2012) *Gross Domestic Product Preliminary Estimate, Q3 2012*. ONS, London, UK. See http://www.ons.gov.uk/ons/dcp171778_284925.pdf (accessed 30/10/2012).
- Simm JD (2012) A framework for valuing the human dimensions of engineered systems. *Proceedings of the Institution of Civil Engineers – Engineering Sustainability* **165(3)**: 175–189, <http://dx.doi.org/10.1680/ensu.10.00034>.
- Vicat A and Rooney C (2012) Briefing: London 2012 Olympic Park transport and environmental management schemes. *Proceedings of the Institution of Civil Engineers – Engineering Sustainability* **165(2)**: 113–120, <http://dx.doi.org/10.1680/ensu.12.00007>.