

Finalist evidence from Edinburgh International Conference Centre on the 'Best measurement tool for effective results' in the UFI 2014 Sustainable Development Award

# Scope:

Identify the measurement tool, its developer and the time period the tool has been used. Detail the sustainability issue(s) covered by the tool.

EICC uses a bespoke analytical tool developed in-house (from 2005), enhanced by Zero Waste Scotland (from 2011) and validated by the Carbon Trust (from 2013). The tool measures performance and sets benchmarks for the management of energy, waste and CO<sup>2</sup>e footprint.

[eicc.co.uk, zerowastescotland.org.uk, carbontrust.com]

# Background & objectives:

Provide explanations on how this/these issue(s) was/were identified and which strategic objective(s) is/are operationally served with the tool. Explain the future plans, if any.

Strategically, EICC is committed to best practice in sustainability and to building its reputation as a green business.

EICC is a declared supporter of the Scottish Government's Climate Change (Scotland) Act 2009 which targets a 42% cut across a basket of six major Greenhouse Gases by 2020. The company is also is a lead signatory to the WRAP / Zero Waste Scotland Hospitality and Food Service Agreement (HaFS). Under this agreement EICC targets a reduction in food and packaging waste arising by 5% by the end of 2015, against a 2012 baseline measured by CO<sub>2</sub>e emissions. The agreement also commits EICC to increase the overall rate of food and packaging waste recycled, sent to anaerobic digestion or composted, by at least 70% by the end of 2015.

The HaFS Baseline Data Assessment (2013) is attached as Appendix 1.

Commenting on his data assessment James Horne of Horne Consulting said:

"It was a very interesting visit and I was extremely impressed by the systems you have in place for minimising and managing waste at the site - I think I can safely say they are the best I have seen during the hundreds of site waste assessments I have performed!"

WRAP and Zero Waste Scotland are recycling initiatives funded by the National and Regional Governments of the United Kingdom.

[wrap.org.uk]



## Implementation:

Detail the actions implemented, indicating interesting elements in terms of planning and resources, for domains including the data collection, the quality assurance, the change management (if relevant), etc.

Adherence to the European Foundation for Quality Management (EFQM) Business Excellence Model ensures that EICC's business approaches and processes are embedded at leadership level, extend throughout the enterprise and its business networks and account for impacts on a wider society. Supporting the model are eight Fundamental Concepts of Excellence including, 'Creating a Sustainable Future'.

Central to the success of EICC's sustainability approach is a cross-functional Green Team that gathers and draws on a rich quarterly review dataset to inform its continuous improvement actions. EICC business functions represented are: (1) Human Resources and Total Quality Management, (2) Sales and Marketing, (3) Event Design, (4) Catering, (5) Technical Production, (6) Facilities, (7) Cleaning and (8) Finance and Administration.

The Green Team is empowered 'to help customers stage successful events'. They deploy a proven 'Reduce, Reuse and Recycle' continuous improvement approach, quantify and signpost event specific carbon credit acquisition options. Operationally this drives a virtuous cycle, achieves reduced operating costs and helps build customer loyalty.

The business goes beyond the Environmental Management System ISO14001:2004 requirement in benchmarking a Total Carbon Footprint expressed in tonnes of  $CO_2e$  and broken down across a range of industry specific metrics: (i) delegate day, (ii) delegate, (iii) catering cover, (iv) employee and (v) event. The nine-year Total Footprint trend (2005-2013), validated by The Carbon Trust continues downward when adjusted for the increased scale of the venue.

The Green Team is profiled in a short video presentation submitted for the 2011 EFQM Sustainability Good Practice Award and can be viewed at <a href="http://www.eicc.co.uk/organising/plan-it-green/">http://www.eicc.co.uk/organising/plan-it-green/</a>

EICC was highly commended in the competition judged alongside major corporates such as Ricoh and Fiat.

Evidence of this strategic approach can be found in EICC's Plan-it green<sup>™</sup> Sustainable Events Programme.

[http://youtu.be/ITZG7CimFvQ]



## Measurement tool:

Describe the tool, including its technological aspects. List its indicators (and indicate, if possible, the link with an international framework like, for instance, GRI) and explain the way they are calculated (ratios used, etc.), the monitoring aspects, etc.

EICC's bespoke measurement tool is Excel spreadsheet based making it both accessible and affordable. Familiarity with the tool also promotes enterprise-wide compliance in its application. Fifteen elements of EICC's carbon footprint are actively monitored:

(1) Electricity, (2) Gas, (3) Business Travel, (4) Water, (5) Paper sheets, (6) Paper recycled, (7) Cardboard recycled, (8) Plastic recycled, (9) Cans recycled, (10) Glass recycled, (11) Kitchen oil, (12) Lamps recycled, (13) Dry mixed recycling, (14) landfill waste and (15) food waste composted.

The EICC Monitoring and Measurement Event Tool dataset 2005-2013 and a typical event forecast (International Forum for Natural Capital) are attached as Appendix 2.

UK Government Department of Energy, Food and Rural Affairs (DEFRA) 2012 Conversion Factors are applied to this dataset through embedded spreadsheet formulae enabling prompt, standardised reporting of energy, waste and transport metrics as quantified CO₂e emissions. This level of monitoring means EICC meets and exceeds the requirements of Waste Scotland regulations in force from January 2014.

EICC's measurement capability also includes an Event Tool that can forecast an event-specific carbon credit acquisition requirement. Repeat event customers can use the forecasting tool to guide carbon footprint reduction over time.

EICC has adopted the European Foundation for Quality Management (EFQM) Business Excellence Model as an international framework for the delivery of continuous improvement in its business operations. In 2003, the business was an EFQM Award winner and also took the People Development and Involvement Prize. In 2011, EICC's Plan-it green™ Sustainable Events Programme was Highly Commended at EFQM's Sustainability Good Practice Awards.

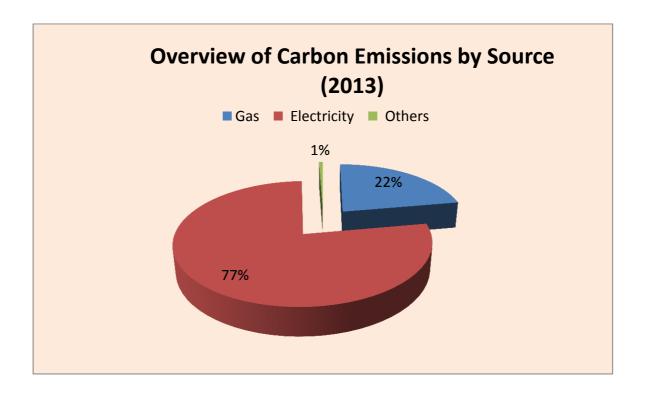
Additionally, EICC pursues independent external benchmarking to health check operational resource allocation and stakeholder relationships. The business holds international Environmental Management System (EMS) ISO14001:2004 and was the world's first purpose built conference venue to achieve the standard in 2002. Reassessments have been carried out subsequently in 2005 and 2011 and the current ISO14001 award, certified by BM TRADA, is effective through 2017.



#### Results:

Provide the detailed objectives and results of the tool's application with, if possible, trends over a defined period of time and, if available, a costs and benefits analysis. Indicate which results are "internal only" (if any) and which others are made available to the public (while some confidential data may be accepted as part of the award application, only those applications permitting a minimum level of data for public communication will be recognized).

The tool measures performance and sets benchmarks for the management of energy, waste and CO<sub>2</sub>e footprint. Scope analysis on emissions reveals that electricity usage is the biggest area for improvement accounting for 77% of EICC's total carbon footprint. Gas accounts for 22% and Others category just 1%.

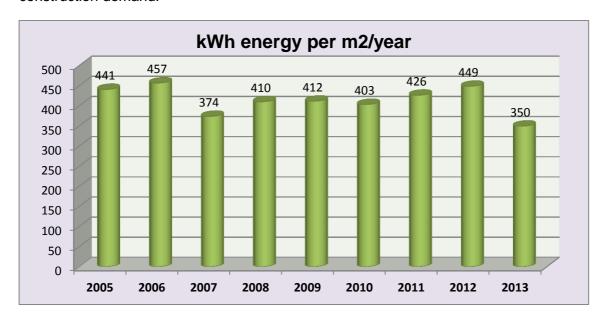


Breakdown of emission sources indicates that the EICC should emphasize energy efficiency measures. A new energy plan is currently in development designed to capitalise on recent Building Management Systems (BMS) investment.

Reducing and recycling waste is important for resource conservation (Others category ie waste, etc), but proves less important for the centre's carbon performance. Nonetheless, the emissions averted by implementing better waste management practices.

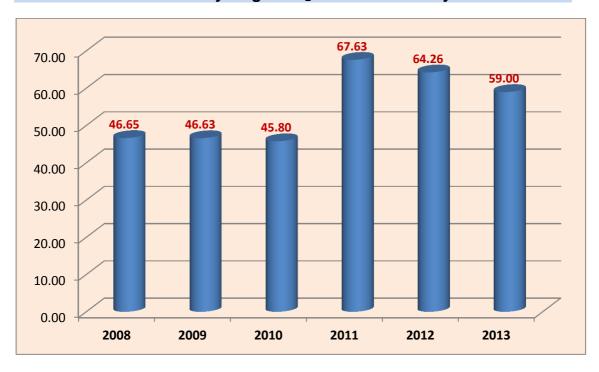


However, the trend for total energy use is observably downward on the chart that expresses  $CO_2/m^2$ . Spikes in 2011/12 are attributable to EICC Expansion Space construction demand.



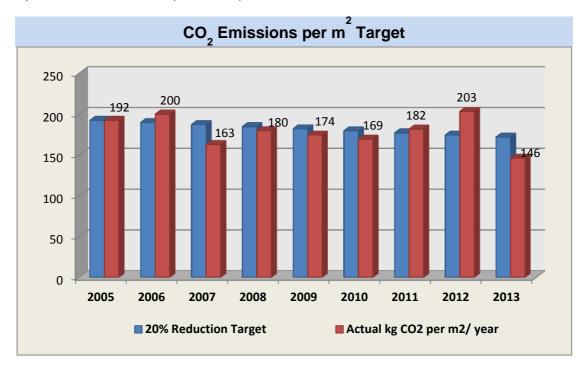
Tonnes of CO<sub>2</sub> diverted annually had plateaued but increased markedly with higher levels of waste arisings during the peak construction phase of EICC's Expansion Space. The new space opened for business in 2013 and increased level of emissions diverted has been sustained.

# Waste Recycling - tCO<sub>2</sub> Diverted Annually



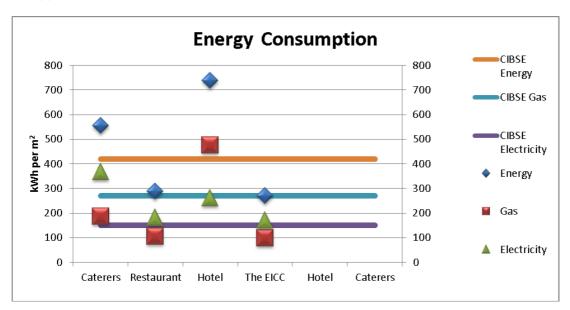


The long term CO<sub>2</sub>/m<sup>2</sup> trend is down and ahead of target including nine months of operations of EICC's Expansion Space.



EICC is an active participant in benchmarking schemes that drive behavioral change. The chart below is extracted from an independent report commissioned by Resource Efficient Scotland (RES) which charts EICC's performance against hospitality sector peers.

Monitoring and Measuring to Drive Behavioral Change Summary Report is attached as <u>Appendix 3</u>.





The EICC energy consumption for February 2012, benchmarked against floor area with Chartered Institute of Building Services Engineers (CIBSE) benchmarks for entertainment halls included. Other participant's data is included.

At the event level a longitudinal study of the annual 1,200-delegate Guardian Edinburgh International Television Festival (GEITF), hosted at EICC, in the period 2007 to 2012 reveals that energy usage is down 91.5% from 1.42kWh in 2007 to 0.12 kWh per delegate in 2012. While, total catering waste fell from 1,666 kg in 2007 to 173 kg in 2012, a reduction of 89.6% in the five-year monitor.

"Minimising the impact of our event on the natural environment has always been central to our ethos, EICC understands this and works with us to find real, measurable, ways that make our event sustainable. It's a partnership that we value very highly".

GEITF Production Director, Nicky Clarke.

Through engagement with EICC's Plan-it green™ Sustainable Events Programme customers are encouraged to optimise their environmental impact and sequestrate any residual position. This can be achieved by offsetting measured event specific emissions to a carbon sink of native Scottish woodland. The scheme is developed and brokered by Forest Carbon and implemented by the Borders Forest Trust <a href="http://www.eicc.co.uk/organising/plan-it-green/carbon-emissions-mitigation-programme/">http://www.eicc.co.uk/organising/plan-it-green/carbon-emissions-mitigation-programme/</a>.

## [bordersforesttrust.org]

Carbon credits are generated by a new 350-acre woodland at Corehead, near Moffat in Dumfries and Galloway. In addition to carbon capture the woodland offers flood mitigation, biodiversity protection and enhancement, pollutant scrubbing and recreation.

The development is accredited under the UK Woodland Carbon Code and credits are listed on the Markit Woodland Carbon Registry. <a href="http://mer.markit.com/br-reg/public/index.jsp?q=eicc&s=ch">http://mer.markit.com/br-reg/public/index.jsp?q=eicc&s=ch</a> The woodland is protected in perpetuity and open to the public.

#### **About EICC:**

Opened in 1995 EICC has welcomed over one million delegates to Edinburgh and delivered an economic benefit in the city region in excess of £400m. In the nineties the business led the transformation of a brownfield site, the former Princes Street Station, to create The Exchange Business District. The regeneration process has brought sustainable employment to the city and the wider Scottish Economy. In 2013 EICC opened a £30m Expansion Space that completed the master-planned Exchange with the social dimensions of sustainable development to the fore.

EICC holds the industry specific Goldstar Award from the Green Tourism Business Scheme <a href="http://www.green-tourism.com/">http://www.green-tourism.com/</a> first recognised in 2002 and re-awarded biennially to date. According to the GTBS this places EICC in the top 2% of green businesses in the UK tourism industry. EICC is a company with a single shareholder, The City of Edinburgh Council.