

water demand bulletin management

www.environment-agency.gov.uk/savewater

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Awards 2009

The call for entries for the 2009 Water Efficiency Awards has been issued. The awards aim to increase awareness and share good practice of water efficiency among businesses, public sector and voluntary organisations, and ultimately the public. The closing date will be 17 April and the winners announced in London on Wednesday 15 July 2009.

The categories for entry this year (and sponsors) are:

Water Shout Award – celebrating campaigns that change peoples' attitude to the way they use water (Ofwat)

Water Save Award – recognises practical measures that save water and money (Food and Drink Federation)

Water Solve Award – acknowledges smart solutions for sustainable water use (Defra).

Chief Executive Awards – Two organisations, one from the Water Utility sector and a company from the wider business sector, will be selected for the Chief Executive Awards. These awards will reward businesses for their overall outstanding efforts to deliver water efficiency, including water and energy savings, communications and innovation.

The partners for the Awards are Business Link, Envirowise and IEMA (Institute of Environmental Management and Assessment) and the Media partner is Utility Week.

To coincide with the awards launch, the Environment Agency issued details of a survey of UK businesses which is summarised on page 10.

For further details visit www.waterefficiency-awards.org.uk/index.php

Water Efficiency Water footprint gathers pace

Global businesses supported by WWF are showing great interest in applying the water footprinting concept. London Business Conference's Water Footprint Summit revealed the reasons why.

In 2002 the concept of the water footprint was developed by Professor Arjen Hoekstra at the University of Twente who, using ecological footprint as a template, produced a practical and encompassing indicator of water use. The water footprint of a product refers to all freshwater used to produce the product, measured over the various steps of the production chain.

The idea of the water footprint grew out of the virtual water concept introduced by Professor Tony Allan (visit www. sbpconferences.com/presentations/ Water2008/Day2/Morning/AntonyAllan.ppt to see his recent look at water challenges facing Europe) in 1998 and subsequently quantitatively defined by Hoekstra.

The virtual water concept was used to convey the message that a water-scarce country can save water by importing virtual water such as in the form of waterintensive food products.

The water footprint shifts the perspective, showing that the consumption of a waterintensive product relates to water use and associated impacts in the country where the product was produced.

The interest then shown by WWF and some of the world's major corporations has meant that, by 2007, the water footprint has became a widely accepted means of estimating a businesses' water use impact in its supply chain, in its own operations and in the stage of product use by customers.

To facilitate this interest a Water Footprint Network has been established to bring

together expertise from academia, businesses, civil society, governments and international organisations.

Its mission is 'to promote sustainable, equitable and efficient water use through development of shared standards on water footprint accounting and guidelines for the reduction and offsetting of impacts of water footprints'.

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Momentum

All this was revealed at London Business Conference's two day *Water Footprint Summit* 2008 event in December. With the content-rich **www.waterfootprint.org** website and further *Global Water Footprint* events in the USA (26-27 February 2009, www.water-footprint-usa.com) and Brussels further momentum appears guaranteed.

A notable catalyst is that businesses are realising that water is a finite resource that is often used inefficiently. This implies there is a significant risk of insufficient water of the right quality for companies to continue to source their products. There is the additional risk of stricter water regulation.

As WWF's Stuart Orr remarked 'those paying attention to water will remain competitive' (WWF-UK's report UK Water Footprint: the Impact of the UK's Food and Fibre Consumption on Global Water Resources demonstrates WWF expertise in this field - http://assets.panda.org/ downloads/wwf_uk_footprint.pdf).

M&S's Mike Barry related how the company had begun to see evidence of shortages of water in the supply chain adding 'if Coca Cola, Nestle and others are worried I should be worried too'.

In an age of climate change and environmental concern, responsible water use is increasingly seen as promoting a positive corporate image.

There is an opportunity to link in with other social and environmental movements such as the *Better Cotton Initiative* (www.bettercotton.org)

By collecting the data required to calculate their water footprints, companies have a framework to understand what is going on in the supply chain in some considerable detail and can identify the risks to water supply and the opportunities to improve the situation.

Several presenters touched on the opportunity to rethink the design of products with water use in mind. IKEA is examining a new lighter construction of cloth that uses 20 per cent less cotton.

Several speakers touched on the similarities and difference with carbon footprinting and the issue of 'offsetting'. Applying carbon footprinting offsetting has meaning as carbon emissions are a global phenomenon. By contrast water scarcity is a local issue and thus offsetting does not solve the local issues.

Big effort

The scale of the effort involved can be gleaned from the fact that M&S have 35,000 product lines, involving 2,000 factories and 20,000 farms around the world. M&S has 75,000 employees and 21 million customers each week using their products. Mike Barry estimates that 60 per cent of the water footprint was in the supply chain and 30 per cent through water use by customers when using their products.

Obviously there is a need to identify the 'hotspots' and this is where the partnership with WWF is proving invaluable. WWF has the expertise and the networks that can identify where impacts on water resources are the greatest in a particular region of the world.

M&S are looking to provide information and devolve responsibility so that suppliers can improve their skills and innovate to reduce their water footprint.

He said that 'there is no magic solution - it is just very hard work' and warned of jumping in too quickly to avoid cultural difficulties. He saw water footprint labelling on products coming in later rather than sooner.

M&S were only one of many global companies at the conference. Unilever, Coca Cola, IKEA, Pepsico, Nestle, Cadbury Schweppes, Walmart, Mars and Kimberley Clarks amongst others described how they are at various stages of using the water footprint concept in earnest.

Such companies have the internal resources to carry out the daunting investigative work and to address the impacts. The conference heard that the challenge is to assist medium and smaller companies to calculate their water footprint.

UK involvement

UK businesses, UK branches of global companies and UK consultancies are very much in the vanguard of developing and using the water footprint concept.

Amongst many examples, Neil Pendle described how his company, Waterscan, has been helping Whitbread to reduce their operational water footprint at their 556 Premier Inns. It involved not only systematic metering (including leak alarms) within the hotels but also challenging the current design standard for the rooms.

Rainwater harvesting and greywater recycling is being pioneered at their flagship green hotel in Tamworth. The next stage is to look at the water footprint of the supply chain.

Business risk

The risks to business from water scarcity is emphasised in Eurosif's water report – *Critical Water Issues Facing Industries*.

Most sectors involve activities for which water is critical for some stage of production. However certain industries, by their very nature, involve activities that have a greater exposure to water related risks, such as: agriculture, mining, food and beverage, energy, forestry and various water treatment, water supply and sanitation industries.

In general, water-intensive industries in water-scarce countries have the opportunity to import products with high virtual water content rather than producing them domestically. By doing so, it allows real water savings, relieving the pressure on local water sources.

Visit www.eurosif.org/content/ download/1255/6707/version/1/file/ Water_theme_report.pdf

School footprints

Carbon footprinting can mean taking water into account as BSRIA's *Primary School Carbon Footprinting* report illustrates. It examined a Victorian school, a 1970s school and a post-millennium sustainable school and asked which one has the lowest carbon footprint?

Visit https://infonet.bsria.co.uk/booksdownloads/details/?p=2&i=219185&pa= pdfs&anc=17 for details.

On the margin

The Water Margin – How Strategic Management of Water can Grow Business Value by global management consultant Authur D Little is an excellent resume of the risks to business and the application of water footprinting.

The report highlights that water and carbon have quite different characteristics and impacts. Addressing a company's water and carbon issues requires a balancing act, recognising the differences but also the synergies that can be derived from addressing both in a strategic, coordinated way.

The report can be obtained via www.adl.com/watermargin