ACCA

Water: The Next Carbon?

ACCA held the first in a series of 'Friday Forums' on Friday 13 March 2009 on water footprinting. The event was chaired by Professor Jeffrey Unerman, professor of accounting and corporate accountability from Royal Holloway, University of London. Dr Dave Tickner, head of freshwater programmes at WWF UK, and Andy Wales, head of sustainability at SAB Miller were asked to present their perspectives on the issue. Copies of these presentations can be downloaded from the ACCA website at www.accaglobal.com/sustainability. The key points raised at the event are summarised in this discussion paper.

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WATER: THE NEXT CARBON?

1) Introduction

Over recent years, the issue of climate change has steadily risen up company, government and civil society's agendas and is now recognised as a significant business issue and one that must be managed. According to Lord Stern's account of the impact of climate change on the UK's economy, published in October 2006, operating on a 'business as usual' basis will lead to a loss of 5–10% of global GDP. When taking into account other issues such as impact on the environment and human health, this increased to 20%, compared with just 1% if business and government take 'immediate drastic action' to tackle climate change by 2050.

Another significant issue, one that is closely linked to climate change, and equally important, is that of water – more specifically, water use and requirements, government and business management, security of supply and accounting. This issue has been a focus for environmental NGOs and charities and scientific research for many years, and with it, the growing realisation that water is a significant material risk and one that requires a different response to that required for carbon (which has been more widely covered).

Business leaders recently urged water, climate change and energy to be linked in global negotiations, including the forthcoming 'COP 15' meeting in December, where post Kyoto deals will be discussed. The resulting publication by the World Business Council for Sustainable Development (WBCSD)'s, called *Water, Energy and Climate Change: A contribution from the business community*, was launched at the 5th World Water Forum in Istanbul, and made several recommendations, including integrating water and energy efficiency in measurement tools and policy, bringing water issues into the mainstream and encouraging best practice through innovation and community engagement.

WATER AS A BUSINESS ISSUE

So, why is water a significant issue for business? Dr Dave Tickner, head of freshwater programmes at WWF UK identified four key business risk areas arising from water scarcity and management issues.

Physical risks – arising through flooding, pollution, and scarcity of water in the regions where an organisation operates. This scarcity can be caused by an actual deficit of water or through a failure of supply from water managers. This is especially true for water-intensive sectors, which may have to transfer operations to a more water-rich area, or one where the regulatory environment is more coherent.

Financial risks – arising from competition, increase in water tariffs and other pricing mechanisms, and cost inflation of water and energy as a result of increasing water stress across regions globally. Higher costs, plant closure and reputational damage are other risks arising as a result of water scarcity.

Regulatory risks – as water scarcity and corruption and security issues increase, governments may decide to control business water use and decrease the number of water extraction licences issued, or change the rules that govern water use, licensing and allocation, or the costs and conditions of water put back into the system.

Reputational risks – those businesses that fail to understand the impacts that their operations, supply chains and discharges have on water resources, aquatic ecosystems and local communities are leaving themselves open to reputational risks and potential loss of customers and investors.

An Arthur D. Little report published in 2008 stressed that organisational risk management should be a proactive, rather than a reactive process, and failing to make water management a strategic issue could lead to challenges relating to water security, supply chain risk, regulation, failing to meet consumer and investor expectations and local vulnerabilities.

2) Actions for business

GLOBAL VS LOCAL ISSUE

Water issues, although closely linked to climate change, need to be addressed by business in a very different manner. Water is unique, compared with other resources, in that the availability, management and impacts of water are local at a watershed or river-basin level. The hydrological processes underpinning water availability are also, to a certain extent, uncertain so one cannot predict what the situation will be in the future. Water therefore needs to be dealt with appropriately through improved management, taking into account local and regional issues.

WATER FOOTPRINT

So, what can organisations do to start managing this issue? One action is the determination and calculation of the water footprint, to ascertain where material water impacts originate (both in terms of the region affected and the impacts themselves) and how they can be managed. Calculation of this footprint then leads on to comprehensive disclosure on the issue within annual and sustainability reports.

An organisation's water footprint can be thought of as its 'direct' and 'indirect' or 'virtual' water impacts.

Direct water – 'internal' water that is used directly from the tap, taken directly from a company's own country's water resources.

Virtual water – water that is used throughout the entire 'cradle to grave' process to produce a product or service (for example, water used in order to grow crops, feed animals and use products at the consumer end of the supply chain). Virtual water is much more complex to measure than direct water.

The concept of calculating organisational water footprints is still relatively new. Work done so far on this includes WWF UK's research on calculating the UK's water footprint for the food and clothing sector, published in 2008. Using a methodology developed by Chapagain and Hoekstra and national trade data from PC-TAS, the resulting statistics and report provide an informative overview of the issues involved and outline key action points for business, government and consumers in terms of reducing water footprints.

The WBCSD has published a Global Water Tool, the second version of which was launched at the World Water Forum in Istanbul. It is a free, user-friendly tool that businesses can use to map out the water use of their products, services and operations, and assess risks relative to global operations and the supply chain. Businesses using the tool can ascertain what proportion of sites, employees and suppliers are in water-stressed areas, enabling them to calculate water consumption and efficiency, leading to comprehensive reporting, communication with stakeholders, and risk identification and management.

The Water Footprint Network, a non-profit, multi stakeholder, Netherlands-based foundation, also provides a water footprinting methodology, which is the basis for the WWF UK research outlined above. The network's aims are to promote water footprinting and provide an information resource for members and other stakeholders on the issues – including the development of standards, tools and methodologies for measurement and management.

ENGAGING WITH GOVERNMENT ON PUBLIC POLICY

Calculating a water footprint and disclosing information on this and how the impact is being managed form one element of the drive towards sustainable water use. As Dr Dave Tickner points out: 'Doing this in isolation from government regulation is ineffective, as one single organisation's efforts will be in vain if another can simply use the water saved. Private sector organisations need to engage with government and other stakeholders on public policy of water – the extent to which and how water use should be regulated, monitored and managed.' Owing to the nature of the water issue, it is important that engagement must be developed and carried out on a local level, as there is no 'one size fits all' approach.

The recently formed 'Water CEO Mandate', launched in July 2007, is the first public-private initiative designed to assist companies in the development, implementation and disclosure of water sustainability policies and practices. It is governed by the UN Global Compact and the Swedish government and seeks alignment with the UN Millennium Development Goals. Signatories commit to making water-resources management a priority and to working with governments, UN agencies, non-governmental organisations, and other stakeholders to address this global water challenge.

SABMiller, the global brewery company, has identified water as one of its three 'opportunities for global leadership'. It has comprehensively measured and reported on its water footprint in different regions of operation, and devised a '5R' model of water responsibility. Its overall goal is to brew more beer, using less water, and in doing so reduce water use per litre of beer by 25% by 2015. The key ways in which it does this are by identifying which sites are most at risk from water stress, investing strategicaly in efficient technology at brewing plants, engaging with public sector authorities on water issues, and ensuring that local managers have sufficient information, capability and flexibility to take water efficiency into consideration when managing the plants. Through its value-chain water footprint of beer and soft drinks in South Africa, undertaken by independent consultants with strategic advice from WWF, SABMiller has been able to identify the key agricultural crops and growth areas that present long-term risks to the value chain owing to water scarcity. It is using this insight to focus its engagement with its farming suppliers to improve water efficiency and yield management. SABMiller reports on these issues in its annual sustainability report and annual report.

3) Key discussion points of the Friday Forum

The key questions and discussion points of the event are summarised below.

A lot of the focus so far in terms of water footprinting has been on the agricultural and commodities sector. What about other sectors: energy, electronics, etc?

The work on water footprinting is still in its infancy, and so far, work has tended to focus on those sectors with significant 'upstream' impacts (water intensive in the manufacture/farming process). Nonetheless, there has been engagement more recently among those sectors that have significant downstream water impacts, for example, products such as washing powder, which require a lot of water use at the consumer end of the supply chain. That is not an indication that other sectors such as energy and electronics should not, or indeed do not work on this: Shell has done a lot of work on water management but has not necessarily engaged as much on the issues. Projects such as the World Economic Forum's water initiative are focusing on expanding the sectors that are involved to energy and electronics.

Can water be considered a renewable resource?

Strictly speaking, water can be considered a renewable resource. In practice, when considering the issues in the context of business cycles, it is often not appropriate to treat it as such, owing to the long timescales involved in restoring water supplies. For example, it could take two lifetimes to restore a dry aquifer to its original state, which is no use for strategic planning in business cycles. Climate change should also always be a consideration regarding water cycles and how they are likely to change in the future.

What is the role of the private sector in strategic community investment with regard to water?

Water underpins the economic growth of many areas so strategic engagement with communities to raise awareness of the issues should be a priority. There has been a lot of debate around the role of the private sector in terms of water provision and management – certain stakeholders feel that it should stay away completely from community water provision projects. Business' engagement and activities should be in the context of enhancing and strengthening local government water provision and engagement with local communities – the private sector needs to be a supporter of this, not the leader.

To what extent is business engaging with mainstream investors on water issues?

Water and finance are one of WWF's future focus areas and the team is currently in the process of engaging with the financial sector about water and risk. The interest of the financial and investment community varies, depending on the area. Insurance companies tend to be concerned with flooding, investors in food and beverage companies are concerned with water scarcity, and credit rating agencies with other issues again. Some investors who are broadly aware of the issues are definitely engaged, which was demonstrated by the attendance of JP Morgan and others at 'World Water Week' in Stockholm, so it is clearly becoming more important. Nonetheless, in terms of company engagement, it is fairly rare for mainstream analysts to ask anything on corporate responsibility issues and it is up to sustainability managers to raise awareness on the issues internally at CEO level and externally with the investment community. It is also the role of the SRI community to raise awareness among their mainstream investment colleagues.

REFERENCE LIST

The following reference list can be used as a starting point for information on water publications and initiatives. It is not an exhaustive list and focuses mainly on those mentioned at the discussion forum:

1. WWF UK Water Footprinting project, http://www.wwf.org.uk/what_we_do/safeguarding_the_natural_world/rivers_and_lakes/water_footprint/index.cfm

2. WWF UK, *Investigating Shared Risk in Water: Corporate Engagement with the Public Policy Process,* http://assets.wwf.org.uk/downloads/investigating_shared_risk.pdf

3. WWF UK series on water security, http://www.wwf.org.uk/research_centre/?2842/Understanding-water-risks

4. SAB Miller, sustainable development section, http://www.sabmiller.com/index.asp?pageid=4

5. UN Global Compact, *CEO Water Mandate,* http://www.unglobalcompact.org/Issues/Environment/CEO_Water_Mandate/index.html

6. WBCSD Water Initiative, http://www.wbcsd.org/templates/TemplateWBCSD5/layout.asp?type=p&MenuId=ODI&doOpen=1&ClickMenu=LeftMenu

7. Water Footprint Network, http://www.waterfootprint.org

8. Arthur D. Little, *The Water Margin: How Strategic Management of Water Can Grow Business Value,* http://www.adl.com/watermargin