

Knowledge Exchange Session 2: Green and Low Carbon Supply Chain

29 June, 2009

The second LSCM/SEAMS knowledge exchange session was successfully held at the Enterprise Zone of the University of Sheffield. The session attracted participants who were willing to share their company's and their personal opinions on the low carbon future and what needs to happen for businesses and the greater society to get there. Participants included representatives from:

- 1) DLA Piper
- 2) Cranfield University
- 3) Mott McDonald
- 4) JCB
- 5) TVS
- 6) ECUS
- 7) SEAMS
- 8) SIEMENS
- 9) Northumbrian Water Limited (NWL)
- 10) Life IC Limited
- 11) Scientia-group
- 12) University of Sheffield
- 13) Birmingham University
- 14) Independent consultants

The session begun with presentations from three participants:

- Teresa Hitchcock, a Partner of DLA Piper, presented on the current and future legal frameworks around CO₂
- Mike Bernon presented on the work he is doing at the University of Cranfield in reducing the CO₂ from the whole supply chain for a range of organisations.
- Eddie Murphy, Technical Director of Mott McDonald, presented the work that Mott McDonald has done for the Home Office in constructing their new offices in Sheffield.

The presentations from these three presenters can be found on the LSCM website ([\[www.sheffield.ac.uk/lscm\]](http://www.sheffield.ac.uk/lscm)).

This was followed by a break-out session where the participants split into three groups. As in the previous session, a number of key questions were posed to the participants. To align with the first knowledge exchange session, the outputs were mapped against the four themes previously identified.

THEME 1: Creation of appropriate benchmarking for assessing companies

Teresa Hitchcock presented on many of the existing legal frameworks around carbon. She emphasised that these frameworks dealt with energy, but failed to address transport and other indirect activities that emit GHGs other than CO₂ (e.g. methane).

An example discussed was M&S, where they have invested a lot of effort in reducing CO₂ across all their activities, beyond energy, including the transport. But when judged within the context of the CRC and assessed in terms of energy efficiency they appear to be below some of their competitors.

THEME 2: Importance of the cultural and behavioural nature of all green and low carbon initiatives

The importance of education was highlighted throughout the session.

Eddie Murphy talked about his experiences with the schools of Sheffield and the importance of educating students to make the changes necessary in the future.

The role of universities was discussed throughout the day by a number of different consultants and practitioners.

Education also continued through to the workplace with the importance of sharing information discussed. Better information about the possible savings in CO₂ and associated business value is important to making business cases for carbon reduction initiatives. However, one could interpret this unwillingness to share information as the first signs that knowledge about reducing CO₂ is now seen as a competitive advantage.

THEME 3: Requirement to model the entire supply chain to deliver the least whole life product cost

Presentation by Mike Bernon and Eddie Murphy further emphasised the importance of considering the entire supply chain.

Mike presented the work and associated benefits that his university undertook with supply chains with companies such as M&S.

Eddie highlighted the work he did for the Home Office building in Sheffield. Here Mott McDonald worked with the supply chain in supplying the right materials and practices in delivery to minimise both the CO₂ in the construction phase of the building, but also throughout the lifetime of the building.

A common message in both presentations was the importance of the design phase.

THEME 4: Business drivers behind implementing green and low carbon initiatives

With the CRC and the oncoming EU and UK acts there will be increasing external drivers for further emphasising CO₂ within businesses.

The role of CO₂ within a range of businesses was discussed from the very large to the very small.

For large corporations, with the advent of the CRC, there is now a legal requirement to address CO₂. General feeling in the group was that for large organisations under the CRC, the cost of carbon and brand are drivers for change. For example, NWL believe that their carbon bill be between £3-6 million, whilst the universities are around £300k. In future, the importance surrounding brand will be increased when premier league like tables will be published as part of the CRC.

Companies that fit under the bar defined for the CRC are already responding. The responses to reducing the CO₂ for these companies was around transport. Examples included, offsetting for business travel and incentive schemes to use transport modes other than vehicles. The role of technology such as teleconferences was highlighted whereby transport is minimised. One suggestion for consultants was to offer two services to clients; one dominated by face-to-face time and another rate which made use of technology and thus limiting transport.

Within smaller companies the business drivers for minimising carbon were briefly discussed but without any clear consensus reached.