CARBONBUZZ

SUMMARY

The Royal Institute of British Architects (RIBA) and the Chartered institution of Services Engineers (CIBSE) invite UK designers and engineers to contribute to, manage and share forecast and actual energy use of their projects anonymously through an online platform called CarbonBuzz. The project will create a sector by sector monitor of UK buildings' energy use and provide a RIBA and CIBSE recognised framework for 'Carbon-Conscious' practice. This cross-disciplinary effort is funded initially by UrbanBuzz and after an extended pilot at the RIBA this October it is due to be launched on 5th November 2008.

Participating practices will be afforded easy access to CIBSE CO_2 emission benchmarks during design and will be able to compare results with actual energy consumption figures once a building is in use. The project aims to set the framework for future benchmarking and provide a means to reduce the discrepancy between design and operational energy consumption, a key concern for the industry.

KEY POINTS

Awareness:

The platform aims to raise awareness of the measurement of CO_2 emission of buildings and the relationship of sector based CO_2 emission figures to building energy use.

Cross-disciplinary industry initiative for free benchmarking:

Championed by Aedas Architects and using software developed by the Building Research Establishment (BRE), CarbonBuzz has been developed by leading architects and engineers to benchmark and track project energy use from design to operation. Through this platform designers will be able to compare forecast and actual energy use against CIBSE's latest sector-based benchmarks as well as all projects entered into the database.

Anonyimity:

Data entered by practices will remain anonymous and will allow the RIBA and CIBSE to establish an up-to-date database of forecast and actual building energy use against which practices can compare their projects and add to the data. In this way, generic project energy use information will provide immediate feedback to the construction industry and researchers on current practice and can also be used to better inform regulation and policy making.

Interactive template for managing energy use across disciplines:

Using data that would have to be produced anyway and so is readily available to users from project M&E, Part L reports and POEs, practices will be able to manage their project carbon emissions using this interactive platform which provides an easy-to-use template to communicate essential and real information to inform the quest for the design of low emission buildings.

Legislative compliance:
The platform brings clarity to the most important legislation introduced since Part L, the Energy Performance Certification and the Display Energy Certification. It highlights the differences between the Part L and EPC compared to DEC assessment methods – currently a source of confusion in the industry. The platform will align forecast and actual energy use data allowing architects and engineers to compare 'like for like' from design to completion regardless of the type of certification gained.

Focus on Post Occupancy Evaluation (POE):
Post occupancy evaluation is an essential method for designers and consultants to gain an understanding of the relationship between their designs and their performance in use. CIBSE benchmarks, which provide the basis for the Display Energy Certificates, are based on the **actual** energy use of buildings. By tying the DEC assessment framework into the design process upfront, CarbonBuzz will help designers gain an understanding of actual CO_2 emissions of buildings and bring to focus the importance of design team actions such as, sub metering and the assessment of unregulated energy use, future occupancy, operating hours and special functions, which have a major impact on buildings' actual energy use.

RIBA 'Carbon Conscious Practice' / importance of publishing data
The platform operates using anonymous data but recognises the usefulness of even more tangible published data. In recognition of this, of the importance of POEs and of the severe lack of attributable accessible building energy use data for the industry, practices electing to publish projects with both design and in-use data through CarbonBuzz will be recognized by the RIBA with the designation 'Carbon Conscious Practice'.

Alliance between RIBA and CIBSE:
Closer collaboration between architects and engineers is essential to achieve national reduction targets in carbon emissions. CarbonBuzz is a joint effort between the RIBA and CIBSE.

Launch:
The platform will be launched at the Building Centre on 5th November at 6.00pm. This event will be followed by 3 breakfast seminars where architects and engineers will gain a detailed introduction to the platform and receive help to enter their data.

Next steps:
Participation in the extended CarbonBuzz Pilot:
An extended pilot is planned for the beginning of October in the form of 3-hour workshops at the RIBA. Practices with project forecast and actual energy use of data to pilot please contact the CarbonBuzz project team to join one of the three workshops to be held at the RIBA on 1st, 2nd and 3rd October. For information please contact research@inst.riba.org or 020 7307 5359.

Credits:
The project partner group comprises: Bill Bordass (Usable Buildings Trust), Keith Snook, Anna Gagliano (RIBA), Hywel Davies (CIBSE), Harry Bruhns (UCL), Judit Kimpian, Eleanor Davies (Aedas), Paul Woods (Faber Maunsell), Bill Gething (Fielden Clegg Bradley), Ranjit Bassi, Soni Muthoni (BRE).
Participating practices include: Hamilton Associates, Make Architects, BDP, drMM, Sheppard Robson, HOK, XCO2 Energy, Atelier 10, Mott McDonald.