

Sustainable Innovation 2016
'Circular Economy' Innovation & Design
21st International Conference
7th – 8th November 2016
University for the Creative Arts
Epsom, Surrey, UK
www.cfsd.org.uk



Duncan Baker-Brown, Director, BBM Sustainable Design, UK

Director of BBM Sustainable Design, award-winning architect, senior lecturer at the University of Brighton and an environmental campaigner, Duncan has been at the forefront of sustainable design for over 20 years since he designed and built the RIBA Competition winning scheme 'The house of the Future' with partner Ian McKay in 1994. In 1997 as Co-Director of BBM Duncan was part of the design team that won the competition to design The Greenwich Millennium Village in London. Since then he has practiced, researched and taught around issues of sustainable design & development. Duncan designed 'The House That Kevin Built' with Kevin McCloud in 2008. It was UK's first prefabricated house made almost entirely of organic 'compostable' material and it was built in only 6 days live on Channel 4 attracting 5 million viewers a night. Duncan was the joint curator of the WasteZone seminar series and designer of the 9m high Waste Totem, both featured at EcoBuild 2013.

Duncan was the architect and coordinator of the University of Brighton's 'Waste House', which is Europe's first public building made from approximately 90% material someone else discarded. The Waste House is a 'carbon negative' building creating 30% more energy than it uses. It was constructed in partnership with contractors The Mears Group, apprentices, construction students from City College Brighton and Hove, and design students from the University of Brighton Faculty of Arts. When completed (it achieved full Planning and Building Regulations approvals) it was calculated that over 360 young people helped with the construction, while over 750 school children visited the construction site. The project was initially conceived as a way of proving that construction waste and surplus material (over 20% material arriving on a construction site gets discarded) could be re-used to build a high performing permanent building. However it soon developed into more of a polemic, a thought provoker, including material from other waste streams such as 19,800 toothbrushes, 4,000 toothbrushes and 2 tonnes of denim. The external fabric of the building is finished with 2,000 used carpet tiles and is currently being digitally monitored for projected thermal values. The building is an on-going 'live' research project as well as being part of the College of Arts & Humanities at the University of Brighton and houses the MA in Sustainable Design. It is open for public use, often hosting community events focusing on issues of sustainable design.

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Duncan is currently focusing on further research looking into the potentials of design within the constraints of the 'circular economy'. He has been commissioned by RIBA Publishing to write a book on this subject entitled 'The Re-Use Atlas: a designers guide towards a circular economy'.

Duncan has worked on numerous green retrofit projects for residential and non-residential projects including the TSB funded 'Retrofit the Future' research case studies, ideas to keep & regenerate whole Victorian streets, and the retrofitting and extending of 1960's tower blocks so that they are Carbon Neutral.

Duncan is passionate about looking at ways of making our current cities truly beautiful, sustainable places to live in and to this end he often speaks and writes on issues pertaining to living in harmony with our planet Earth.

For further information about Duncan's work, including his talks, research & writing check out:

<http://arts.brighton.ac.uk/staff/duncan-baker-brown>

www.bbm-architects.co.uk

<http://raconteur.net/business/recycle-to-build-a-sustainable-world>

<http://www.dezeen.com/2014/06/19/waste-house-by-bbm-architects-is-uks-first-permanent-building-made-from-rubbish/>

<http://arts.brighton.ac.uk/ease/the-house-that-kevin-built/about>

<http://www.youtube.com/watch?v=kWUpV6J1JN8>