

Knowledge Transfer Network  
Modern Built Environment

**MBE KTN – Design for Deconstruction**  
Buildoffsite Stakeholders Meeting, 29<sup>th</sup> September 2010



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**About the Modern Built Environment KTN**

**Our Mission**  
*To increase the exploitation of innovation in the built environment for demonstrated business benefit.*

- Funded by the Technology Strategy Board
- Over 11,000 members from across the supplychain
- Delivered by ARUP, BRE, BSRIA and CIRIA
- Part of a network of 15 KTNs spanning all sectors



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**Raising the Innovation Bar**



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**Key Challenge Themes**

- Climate Change Adaptation
- Energy and Carbon Efficiency
- Life Extension and Retrofit
- Process Efficiency



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### Climate Change Adaptation

**Primary focus is on solutions to the issues that will affect building performance in the future climate: comfort, construction and water management**

The climate is changing: wetter winters, warmer, drier summers, more extreme events Need for industry to create adaptation as well as mitigation strategies

Implementation of solutions at build or major refurbishment stage, ahead of critical events



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### Design for Future Climate Competition

- £2.5m Technology Strategy Board funding
- Launching 14th June 2010, closing on 22nd July 2010.
- Need for contract already in place between client and design team
- Open to domestic new build and non-domestic new build and major refurbishment.
- Single company application – e.g. client, architect
- Guidance, forms etc. on website from 14th June
- Applicants briefing (optional) 23rd June (London)
- Another competition in 2011



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### Energy Efficiency and Carbon Reduction

**Primary focus on showcasing near-market innovative products and services which could contribute to significant reduction in energy usage and carbon footprint.**

Key areas:

- Improved insulation of building envelope
- Lower energy products
- Building management & controls
- Smart Grid and smart meters

Building management and controls funding call due in 2011



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### Building Performance Evaluation Competition

- £8m Technology Strategy Board funding over 2 years
- Opens May 2010 – with rolling competition with assessment of applications at quarterly intervals
- Full funding awarded for monitoring and evaluation activity – NOT for construction
- Single company application – developer, owner etc.
- Specific findings are of immediate benefit to applicants. Generic findings widely disseminated



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## Life Extension & Retrofit

Primary focus will be on showcasing products which offer particular performance improvement in existing buildings and infrastructure and brokering new collaborations to increase their uptake.

- Retrofit for social housing – national and regional activities already initiated
- Working with the National Refurbishment Centre to disseminate state of the art knowledge and showcase products
- New Infrastructure workgroup being set up



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## Process Efficiency

Primary focus on showcasing leading edge products and services which improve the build stage and operational efficiency of construction

Key areas:

- Decision tools and data management (BIM etc)
- Improved 'buildability' (higher tolerances, lower defects)
- Future TSB call in this area – early 2011.



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## Katherine Adams and Gilli Hobbs

[BRE](#)

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## Design for Deconstruction

Myth or reality?

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## Trawsfynydd Nuclear Decommissioning Site



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## Process Efficiency

### Developing a theme of "Design for Deconstruction"

Key areas:

- No more "One-offs"
- Should [Healthcare] Buildings be "standard"?
- Standard buildings design?
- Reduce the Cost? Reduce Waste? Programme benefits?
- Stifle the desire for "Iconic Buildings"?
- Who is doing it?



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## Process Efficiency

### Developing a theme of "Design for Deconstruction"

Key areas:

- Does this present new opportunities?
- Attract new players?
- Does it make WLC easier?
- Aid Recycling?
- Work group looking at design for deconstruction with the results published by the KTN and Buildoffsite?



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## How to get benefits and get involved?

- Register as a member for FREE at :  
[www.modernbuiltktn.co.uk](http://www.modernbuiltktn.co.uk)
- Receive our monthly e-newsletter
- Provide case studies on challenges or new innovations for inclusion on the website
- Engage in on-line discussion forum
- Attend events and workshops to find new potential collaborations

