



Energy initiatives

David Adams
May 2010



CAMPAIGN FOR A SUSTAINABLE BUILT ENVIRONMENT

www.ukgbc.org

UK-GBC mission

Our mission is to dramatically improve the sustainability of the built environment, by radically transforming the way it is planned, designed, constructed, maintained and operated.



Existing Homes



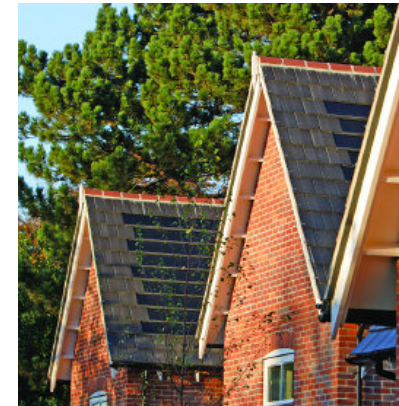
- UK-GBC Report: **Low Carbon Existing Homes** (*October 2008*)
- UK-GBC Report: **Pay As You Save** (*August 2009*)
- **Hosted Conservative's launch** of their '**Green Deal**' (*April 2009*)
- **Great British Refurb Campaign** (*ongoing*)
- **Continue to lobby for an existing homes bill post-election**, to ensure Government introduces legislation to enable private sector financing of home retrofit through the attachment of a standing charge to a property over time (*ongoing*)

Existing non-domestic buildings

- UK-GBC Report: **Code for Sustainable Buildings recommended building MOTs** (March 2009).
- **IGT Low Carbon Construction Review:** Working with BPF, Carbon Trust and CBI to contribute to review (ongoing)
- UK-GBC wants to see **a radical non-domestic refurbishment strategy**, including trajectory for minimum standards and financial incentives, published by government, with the support of industry (ongoing)

New Homes

- UK-GBC report: **The Definition of Zero Carbon** (May 2008)
- **UK-GBC recommendations informed government's consultation on the definition of zero carbon** (March 2009)
- **Zero Carbon Hub** (ongoing)
- UK-GBC wants **Government consistency** on the **2016 Zero Carbon target** and commit to a robust list of **'allowable solutions'** - encourages sustainable community infrastructure (ongoing)



New non-domestic buildings

- UK-GBC Report: **Carbon Reductions in New Non Domestic Buildings** (December 2007)
- **Workshops** with industry to support **CLG's consultation** on **zero carbon new non domestic buildings** (January 2010)
- UK-GBC wants a **policy/regulatory trajectory** and strategy to achieve **zero carbon non domestic buildings from 2019** in place by spring 2011 (ongoing)



Cross cutting....

‘Sustainable Connections’

Can they create low carbon communities?

UKGBC / Zero Carbon Hub Sustainable
Community Infrastructure report



What makes a community sustainable?

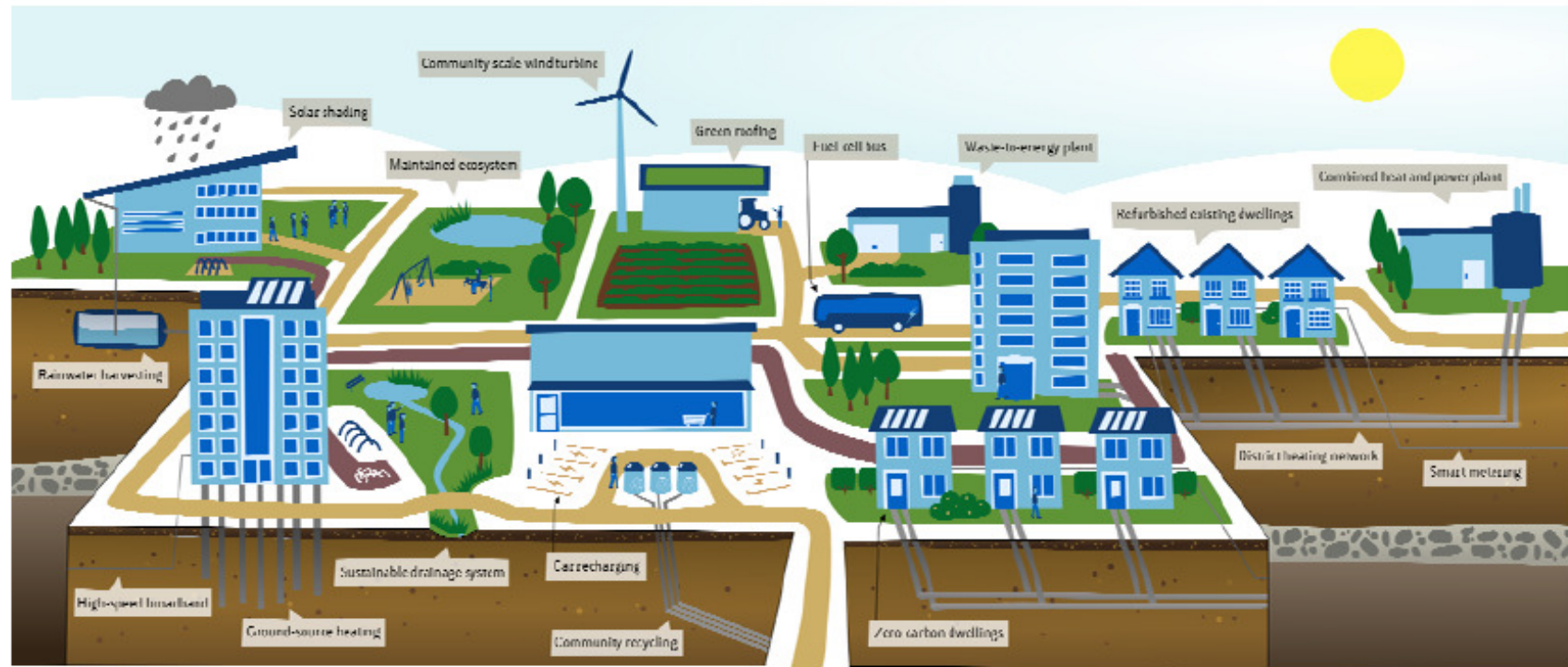


1: Infrastructure

2: Collective behaviour



So what could sustainable community infrastructure look like?



Encompasses: Heat and coolth supply / Electricity supply / Energy generation / Water supply / Water disposal / Waste disposal / Waste re-use / Communications infrastructure / Other (including transport, community farm etc)



Integrated low carbon infrastructure is not a novel concept - Its been done already

Case Study - Sustainable City



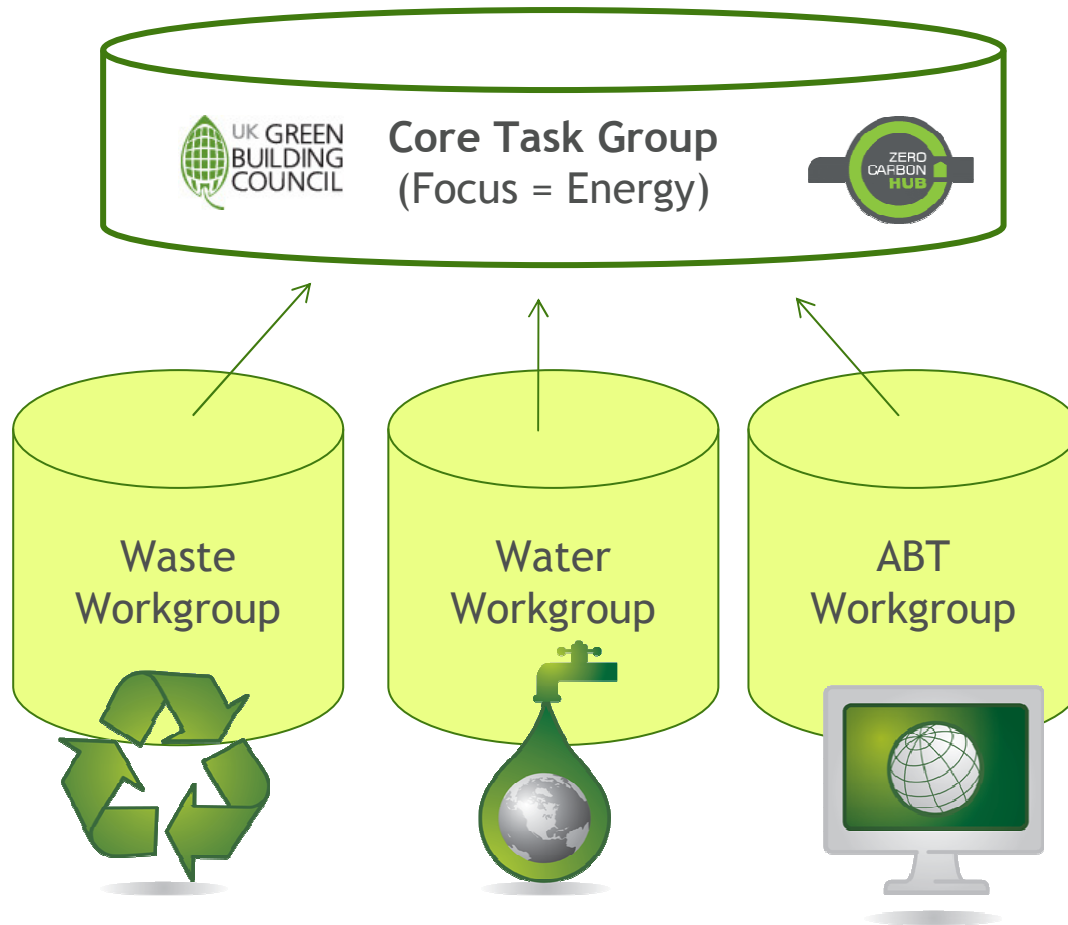
Why did we need a cross industry task group?

HYPOTHESIS:

You'll save more carbon, money and increase sustainability if you link waste, water, communications and energy infrastructure as an integrated package



Task Group structure and members



- AECOM
- Bird & Bird
- Buro Happold
- CABE
- CHPA
- Countryside Properties
- E.ON
- Fulcrum Mott Macdonald
- HCA (Observer)
- Hyder Consulting
- Lend Lease
- REA
- Southwark Council
- WSP Group



Task Group insights - Benefits of SCI

Security of
Supply

Fuel poverty
alleviation

Place making

Carbon
savings

Potable
water saving

Local
investment
opportunities

Community engagement,
empowerment & education



Task Group insights - Some of the barriers facing SCI delivery

Policy fragmentation and uncertainty



Multiple government stakeholders (silos!)



Varying local authority capacity and commitment



Lack of evidence base required for decision making



Lack of strategic infrastructure management mechanisms



Task Group insights - Some of the barriers facing SCI delivery (cont.)

Local environmental and amenity constraints



Multiple stakeholders - no common language



Financial constraints



Build out uncertainty and lack of committed base loads

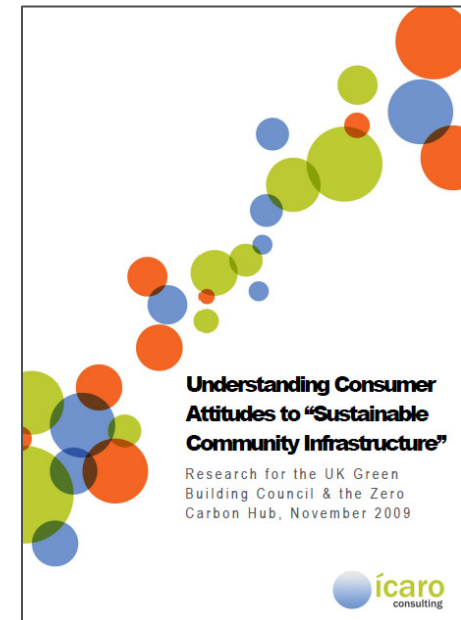


Perceived consumer and stakeholder resistance



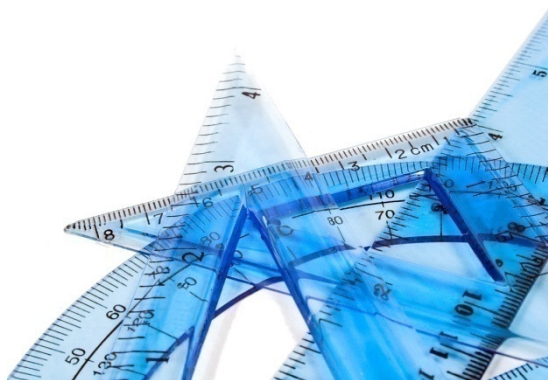
But what do consumers think about SCI?

- Strong public support for “green utilities”
- 71% of people thought that a **district heating system could be better** than the current individual systems in their homes
- Respondents were also in **favour of sustainable community water systems**
- **68% responded positively to community waste and recycling schemes**, whereby waste is collected via a network of vacuum pipes
- **87 % were positive to using waste as a resource to produce energy**
- **73%** believed different facets of sustainable community infrastructure would make their area a **more desirable place to live**



Task Group Conclusions

“Integrated approach to designing and deploying community infrastructure can significantly improve sustainability”



“The vision must be championed and owned by the local authority”

“Delivering this vision can be best achieved through partnerships and risk sharing”



Key Task Group Recommendations

- Public sector buildings to provide anchor-loads for heat networks
- Create an “Office for Decentralised Energy”
- Zero carbon buildings definition to be clarified
- CLG to develop (with private sector) Sustainability Options Plan methodology
- Local Authorities to develop Sustainability Options plan
- Local authority as integrator of delivery
- Private sector to be encouraged to provide anchor-load
- Private sector to make data available
- Private finance mechanisms to be installed



Downloading the task group report...

- To download the SCI Task Group report and associated materials please visit:

<http://www.ukgbc.org/site/taskgroups/info?id=12>





End

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