Briefing Note for Materials UK Construction Working Group meeting to be held on Fri 14th Sep 2007

Over the past 12 months we have had steering committee meetings to agree the terms of reference of the working group and a Community Meeting to get wider involvement of the industry and to focus our attention on the housing sector. The Community Meeting was well attended and we had good speakers to set the scene and breakout discussions to get everyone's views. I have tried to summarise what I consider to be the main points below. Most of our discussions were at a fairly high level, the broad opportunities, barriers and issues. We now need to dig into the product and materials issues in more detail. Although it's the overall performance, cost, appearance, location, etc of the house that determines whether someone will buy it, I think we will need to break a house into elements to get into the required detail on product and materials issues.

So, I would propose we have discussions related to the key physical elements of a future house and some other key subjects which cut across the structure. Perhaps:

Walls

Roof

Floors

Windows

Ventilation, air tightness

Waste

Construction methods

We may be able to combine some of these together and we may need additional categories, although we should be number manageable. Other issues like energy efficient appliances and renewables will affect the performance of a house, but should be largely outside the scope of our discussions, apart from their likely affect on performance targets for the house itself.

My suggestion is that we go through these subjects and discuss:

- 1. the future requirements (which include cost and volume considerations as well as the issues of energy / carbon and climate change).
- 2. the state-of-the-art in the mass market and one-off demonstration projects
- 3. the specific materials and production issues needed to be addressed and potential barriers which might prevent this from happening unless something is done (eg funding, skills, etc).

Some materials (glass, metals, ceramics, insulation, plastics, wood, composites, etc) will be relevant to some of these subjects but not others, so I think we will end-up with a matrix of interest (eg glass is pretty relevant to windows, but not to floors) and the ability to bring it back to a research agenda for each of the main material sectors, which I think would be very useful.

Please can you think about this ahead of the meeting from your perspectives. If you are involved in a particular material sector, which of the subjects listed above (walls, etc) are particularly relevant to you, what is the potential for future improvements in your materials and what is required to drive this.