

## 36<sup>th</sup> Edge Debate held on 22<sup>nd</sup> September at the Institution of Civil Engineers

### 'Influencing Copenhagen: what can we do between now and then – a built environment perspective' - Draft notes

Following presentations from Chris Beauman and Peter Guthrie, Keith Clarke chaired a discussion during which the following unattributed issues, actions and questions were raised.

1. Not new or existing but the interrelation between the two and the role of the planning system – who is producing water, waste and power?  
Let's move away from buildings and on to the built environment...
2. Lots of support industries do not have carbon reduction embedded into corporate objectives. Government needs to be made comfortable changing its model to that of a war cabinet – bringing in the people you need to solve the problem. Should we be arguing with Govt now? Good policy but reorganise. We will give hints on how to do this.
3. What would be the event that would enable this to happen?
4. We work with legislation, most of which is out of date. Carbon intensive commodities drive us to use more and to treat environment as a free good. Policy set invented when appropriate to treat environment as economic laboratory. Is recent collapse enough to change this?
5. What are the scenarios? Collapse is one. But markets have always behaved like this, with the poor always getting stuffed. IF we stay with the same economic order with more nationalisation, how do we become more forceful?
6. Underlying barrier – capital system. Over time, monopoly increases. Innovation comes from startup. Need more money invested at start-up stage. With capital creep, money starts at the top. Need to re-engineer how institutions invest; need to put a dramatically larger amount in the start-ups. Who should make these investment decisions – the market? Needs stimulated injection/redirection. Market is never wrong but always dumb. People are operating in isolation.
7. Economic collapse is working against us. It has increased caution. Previous suggestion generates more risk. t. We need to look at it from a very different perspective, as a way of reducing risk.
8. One of ways of reducing risk is to provide a well-structured base so companies know how to invest. Need regulatory framework that drives this sort of investment. Without regulatory framework we will not drive investment that creates innovation
9. Where has the Govt created certainty for carbon – Code for Sustainable Homes.
10. Getting ourselves into a negative spin. Govt has been forward thinking in setting policy that would have not have full effect for 100 years. Very far sighted. It does chase through into action. Code for Sustainable Homes has changed the way construction takes place in the domestic sector. Incredible result from one piece of legislation. Idea of Govt funding innovation is very difficult. Govt needs to use private sector mechanisms for efficient returns. What might the institutions do? Parallel systems like codes. If we had that kind of courage in standard setting could make real progress.

11. Adaptation. Missed opportunity to link built environment and insurance.. Need to pull the two together. Adaptation = crude civil engineering to stop further effects of things like flooding. Adaptation spend happens anyway. What they don't do is look at the holistic carbon calculator and ask why are we keeping the coast? Different part of the adaptation argument. Adaptation is good practice risk management. Real risk of not linking the two. Another example is Mersey tidal power. Environmental debate has shifted. If you do nothing, the natural environment is dynamic and will go on changing. If we intervene and put in tidal power, there will be a dramatic effect on mud flats and re-stabilisation of environmental systems and for reduced carbon reduced energy it may be a cost worth paying.

12. Out of date structures we have. We would all agree that Whitehall sorting this out would not work. We have nationalised industries that are very national. Implication is not micromanagement but setting targets has got to happen at a more local level. Are we saying that, since no part of the capitalist system is going to solve this, London or wherever is going to set targets and work out local solutions that may force them to take on the utilities and say we cannot have power from a coal-powered power station? You could never get dynamism without subsidiarity?

13. RDAs should have an audit capability for infrastructure investment in their regions. No reason why you could not apply this to sustainable infrastructure. Link to infrastructural investment fund and get it to work on a regional level. This will give us a more sustainable approach to community development. The structures are there in place. Govt moving forward with regional planning programme. It means you have the framework.

14. Zero Carbon schools. Not reinventing wheels, looking to expertise elsewhere. IF each RDA had a carbon budget for its planning you could drag willing and unwilling participants

15. Has been top down so far. A large part of the problem is existing domestic building stock, managed by countless householders. They are responsible for the paradox that as thermal performance has improved temperatures have gone up. ZC schools have the knock-on of enlightened teachers using this to get message across to the parents via the kids. Good news is response of motoring public to petrol prices; usage went down. Shows there is a way of influencing individual behaviour. True but what do we want householders to do. We are in a position of talking to Govt. Our Institutions could be a power bloc if they worked en masse. (1) Think about an educational programme aimed at householders, (2) promote retro fitting know how

16. Built environment largely a supply-side organisation; so how do we change demand. Most people don't know what is in their interest. Professions should be saying Govt should be communicating better to the public to affect demand on the built environment. As professional bodies we have not taken a position on the discount rate, the future value to society. If you did you would be taking a view on the ethical value to society. If you force Govt to say great stuff and stick in discount rate of 0....

17. Problem is so much of this is abstract. We should focus on projects. Unless you embody the crisis in the big actions – Green peace – that is how you are going to dramatise this.

18. Precedent – Swampy and road programme. ICE did everything it could to negate those efforts - SAID report. How to get the projects through a politically charged

environment. IF we are going to take a new position, it would require an enormous shift on how this institution (ICE) thinks.

21. Not long to Copenhagen. Biggest sector is residential. Can build low carbon homes. Solution lies in the increase in value of land when permission for residential consent. Planners are throwing that value away. Planners can ask for zero homes now and the cost for doing that will come from the land price. No point in EPCs that do not result in the upgrading work being done. Come up against the brick wall that is the Treasury. Use existing planning law in 2004 Act and make EPCs work. Principle behind EPCs is excellent in concept but next to useless at the moment. Need to be able to use existing structures not reinventing them.

22. Talked about Code Level 4 and not going beyond this, but Code 4 taking us into uncharted territory that is close to zero and the effort to get to zero is a waste of resource. IF one took a proportion of the money needed to get from Code 4 to 6 and directed it at the existing stock, the impact would be immense, in relative terms. Go to Govt and say this. (This will be discussed at Edge Debate no 39 on 12<sup>th</sup> Nov)

Another opportunity – differential pricing, give a heavily discounted rate and then load the next price. Will solve the fuel poverty issue. With differential pricing you would change the regulatory system so that the first KW is the cheapest.

23. EPCs huge opportunity. In England and Wales weak training for assessors. Need to improve the information that is going out.

24. few face a real crisis of fuel poverty this winter. Differential pricing perhaps allows the two to come together and could be related to progressive housing stock

25. Talking about sticks. Germany has funds to make changes. We can pressure Govt to provide tax incentives

26. Have got to reduce energy by 80%. So far we have only talked about fiddling at the edge. DO we all believe the 80% is something we have to achieve? How soon can we get to individual carbon quotas? How soon can we get our Institutions to take a real position with their members, to push for increased standards? There is a large amount we can do if we have to go on a war footing.

Are we, institutions talking to each other? YES through CIC.....

27. Water industry. Ofwat requiring carbon calculation for opex and capex. Even within those, calculations still stymied by choice of discount rate.

28 Big opportunity – bankers out of work with no product to sell. Lot of creativity to find how to fund energy reduction. Can we continue with conventional growth? How do we get to them?

29. How to use a stick. Why not a market for future sales for electricity akin to mortgages. . Combine mortgages with energy efficiency and have it sold as a single product. Does this mean the free market will solve it? It needs to be set up in the right context

30. Best way of making a difference is getting members to write to MPs. Could be a letter drafted and circulated by CIC

31. What do the institutions think? More members now believe in the climate as a driver than did but still not many. Inspirational leadership could help

32. Leadership. Started talking about the urgency. We will have had it by next decade unless emissions are heading down hill. One thing is proper leadership from the top. Blair didn't provide that. Are there things institutions could do? People talk about carbon and forget about energy.

33. Would money help in getting to the membership. London agency development funding for raising awareness. – Innovative Enterprise Action

34. Demand – unintended consequences and joined up thinking. School journeys. Tidal generation on all estuaries.

35. Public more capable than we think. 80% will have to be done at individual level. Big disconnect between local authorities – not an enabling mechanism. Need radical change. Not wired for the individual. Radical rethink in how Council tax is used. What could we do? It is a journey and some people are on it. Cobe work with core cities. Information to become available in march '09. Each core city has a responsibility to become sustainable. What does it have to do? Most cities are collaborating while remaining competitive with each. Institutions should contribute.

36. First target is make sure we are on track. Second, as an industry can we respond to low carbon demand. Is this a responsibility of the institutions and if so how will they respond?

### **Summing up**

Wide agreement that largest single target is existing stock.

Crisis: there is an energy price and fuel poverty crisis. Any creative thinking that relates carbon concern to this is timely

Lot of thinking to do about structures. Very incorrect and dysfunctional structures.

Utilities bound by 1980s objectives. Moving regionally might be the way to go – subsidiarity

Politics – Climate Change Bill 3<sup>rd</sup> Reading October. Very important document. All institutions need to contribute to this.

Edge started with idea for looking forward 100 years. Conclusion was that it could not be entrusted to either RIBA and ICE. Unencouraged at prospect of giving this back to the institutions. Need for leadership. We need urgent action to re-engage memberships in this issue. Particularly like idea about local action through parish councils.

20-30% is the easy part. We need to have the 80% and we need to know what it will look like. Housing stock, is a very good place for the ICE to start because it is unlikely to antagonise its membership.