

The 19th Edge Debate 4 Dec 2003:

The Tipping Point

'No idea is more appealing', wrote the Economist earlier in the year in an article about the Tory leadership 'than one which appears to offer not only an explanation for the grimness of one's predicament, but also the possibility of escape from it'. The article was about tipping points. The term derives from a mathematical insight known as geometrical progression and is most commonly used to help predict the speed at which epidemics of contagious disease are likely to spread but also for developments such as the spectacular explosion in mobile phone usage, or the fall in New York's crime rate in the early 1990s. It could be a helpful lens through which to view the success we are having with our sustainability targets.

The idea is particularly topical because of the establishment of Margaret Beckett's recent New Sustainable Buildings Task Group. 'Clients' said Mrs Beckett, 'must demand more sustainable buildings. Financial institutions must back developers. We need sustainability at the heart of our skills and professional training. We need architects and designers to incorporate sustainability in their designs. Manufacturers must deliver efficient buildings services and fabric components. Builders must develop and market sustainable buildings, and we need consumers to demand those higher standards.'

We have been able to find few people in the industry that know anything about this new task group or what it is likely to say when it reports to government in February 2004, but that notwithstanding, we wondered how helpful the idea of tipping points might be in getting the right sort of buildings build and moving towards the government's very demanding sustainability targets more generally.

The evening started with short presentations from Mark Whitby, Max Fordham, Anthony Turner of Carbon Sense and David Fisk under the chairmanship of Terry Wyatt. Then the 19th Edge Debate generated 56 thoughts and suggestions on what we should do to make our bit of the world more sustainable which we hope to turn into a small Edge Manifesto. In the meantime the short-hand text gives a flavour of the very fast conversation.

Action List

The following list of thoughts and actions were created on the night:

1. Exceptional buildings are driven by clients. Most buildings in this country are not for user clients. Planning system stops innovation
2. Less owner occupation, more investor-driven buildings. Need to look at investor-building
3. Driver – how to involve the users. They need to realise that it is their pensions. Difficult to make the link?
4. FTSE for good dimension – grade A building (as for fridges) after it has a label will be more valuable?
5. Will labelling change things? You will label bad old buildings. Then we will say what are we going to do with the worst buildings. Some one will say let's make it better. How do we persuade ourselves to do this? Polar bear argument misplaced. Appealing to people to leave the ecology alone is not realistic.
6. Scandinavian label buildings and police-out the poorest.
7. Now there is an EC directive that looks for improvements at point of sale; it is another question as to whether it will be successful. Not about pointing finger at developers. End-users have to demand the buildings they want.
8. Point finger at HM Treasury. Need a fiscal incentive. Ruled out moderated stamp duty for energy label. Missed the chance.
9. Energy taxation. Presumption tax on batch transaction on units of fuel. Not assets. Buildings are energy service structures. Govt needs to take this on board. They are starting to do it on cars. But still think energy tax applies only to the petrol. In context of buildings (and other large assets) utilisation technologies.
10. Also the management of what you do when you have got it. It is about how you can avoid the waste, for instance.
11. Govt as client should make a statement – tipping point for the client. Means property developers would not be able to ignore that part of the market.
12. But evidence is the other way around – what governments do first themselves usually seen as naff. Bad for branding. Get best technology in at the desirable end.
13. End of Victorian infrastructure. We need a vision of how to reconstruct this. Easy to get 90% improvement with new building over old. Perhaps we should be replacing more?
14. Point finger at ourselves. We are not living what we are preaching.
15. Aren't we faced with too much choice and this choice is driven by too much energy. Does this mean legislation is the only tipping point?
16. Don't believe you can legislate the solution. It is about changing tastes. Selling the sustainable to the upper echelon. Institutions are not empowering the people who are their ultimate force...
17. Some clients are different. One demanded a low carbon building at no extra cost. Here is the best practice target. Client will use it in a more intensive way. Planned it without building. It had the same price. Client asked how exceptional is this – very. Able to do it because you – client- asked the right questions. This is the simplest tipping point.

18. But the client has to know. How do people know? Public full of emotion and not enough knowledge. Money for a campaign. – favourite quote "World not given to you by your fathers but lent to you by your children".
19. Problem with getting real. Designers do not know enough about what they create.
20. Fuel poverty also affects those empty nesters with large houses
21. Rich/poor ratios change at 18. Changed by tax. We do not know what it is for carbon consumption.
22. Fuel poverty – every Internet refers to the UK. It is uniquely an UK problem, because British-built infrastructure is so awful. The quality is so bad in terms of energy performance. We need to face up to demolishing some of this poor infrastructure
23. We need to do something about it but not necessarily demolishing it. 20% every year. We had better be putting money away to dealing with this
24. Is it like the Freemasons: look at the amount of new convection electric heating being installed
25. Resonance: low carbon society - people's desires consistent with low carbon infrastructure – eg cycling on Dutch model, flat screens...
26. Only 3 drivers for change (1) fashion, (2) educate people & (3) provide ability for some of the people to do some of these things. We should concentrate on #3
27. But Fashion is much more powerful. Architecture is all about fashion. In terms of setting expectations on the 3 options. Opportunity will be interpreted through the social context set in (1).
28. People do not believe that anything they do will have any effect. We need to demonstrate at what sort of critical thresholds concerted action will make a difference
29. Today the future is not as we got to know it through the Eagle comic. Where are the visions of what it will look like and which will appeal to children
30. Food consumption: unfashionable to consume too much. Used to say the more you gorge the richer you are: now the other way around – example of 1, 2 & 3
31. Focus efforts on the next generation. We are set in our ways and we have a lifestyle to sustain. Sounds like do as I say not as I do. We should be setting the example
32. We have got to lead by example. Young people appear to show the least concern. Young children are being driven more as consumers and this increases energy consumption. Sustainability means changing our way of life
33. Part of the sustainability plan – demonstrations. Serious part of government policy. Might appear an unattractive programme but we need to look at it more closely
34. We've not got the time to leave it to the children. Key point is leadership. Did you hear about the Mayor who swapped the Jag for a Smart car. Leaderships at the intersection between passion and responsibility
35. If there is a tipping point it must be building new homes. Need to see that energy-efficient homes look very different from the sorts of homes we are building. We could change the way that the rating system works. We have not mentioned how much it costs - 20% of windmills is to go through the planning system. We need to build honestly and might be able to halve our building costs.
36. Use the power of our purchasing decisions. We should choose our institution membership on the basis of their performance

37. In the institutional position – we should be the leaders so that people could begin to think more for themselves. We talk all the time, we are not getting our knowledge across in a way that people can apply
38. Hard to sell sustainability to clients
39. We ought to be able to understand what we consume. Get checkout reading of the carbon content of what we buy. Institutionally we should be making this happen.
40. 72% of London's energy used in buildings. We know how to deliver better buildings
41. But we only touch 2% of buildings every year. Not a big enough change (more with refurbishment)
42. Another tipping point: global growth: Chinese + Indian economies expected to overtake US. Europe irrelevant. What we do here will not make much difference. Got to find ways of making the dominant economies tip.
43. Tipping point in your own mind. Been told for 3 decades we have to cut down use of energy. But it is not energy per se it is fossil fuels. Building industry is where we use energy. Ambient systems not the active systems. Need to look at the entire energy system, not just human but nature. The built system is the interface between the two. What we do with the electricity is just fine-tuning. We are focusing all of our measurements on just one part of the package. Asian economies can make a big difference if they put in the effort in getting the buildings right.
44. How to get people to change. We therefore need leaders to show the way. How can we start at home?
45. 1973 energy crisis then in 1979 there was a threat of another. Had a major impact on conservation impact projected on the 1980s. Fear motivates
46. Behavioural change – cf change in attitudes on smoking. What has brought about this change? How can we apply this (smoking, seat belts and drink-driving).
47. People stopped smoking because of the stark images. However not everyone smoking, more in some groups than in others
48. Message needs to be second nature
49. Too much bitching going on in and between the professions. Concerted campaign for more ethical buildings. We need simple tools to help us to do this. More research on the value of doing this. If we all did this, we would be setting a better example
50. Why not have professionals take part of their fees from energy performance of buildings
51. Goes back to measurement and feedback. Not just the car but also the driver. Easier if you had a report from your fuel supplier. Ofgem is refusing to move on this. Actual consumption should be compared with what it should be and what designers expected it to be and where you were before.
52. Professional glossy press does not talk about carbon emissions. This information needs to be foremost on any discussion of a new building. We need to press for this
53. Planning system: needs to happen at the start. Too late when it comes to the building regulations.
54. Planning office targets are focussed on the throughput of permissions and not on quality or carbon
55. Only 2.7% of planning permissions are for major projects (ie 10 or more houses). Rest is concerned with extensions
56. Massive tipping point is Bangladeshis on 1 metre contour and in danger of flooding

57. Most people do not believe there is a problem Task for the professions is to convince them that there is

The Edge

'The Edge' is dedicated to addressing important political, social and professional issues. It seeks to stimulate public interest in policy questions that affect the built environment, and to inform and influence public opinion. It has a committee drawn from the worlds of architecture, building services and civil engineering. It is sponsored by the Carbon Trust. The Edge also exists to provide horizontal connections between the vertical structures in engineering and architecture that institutions impose. Above all, The Edge provides a continuing way of stimulating a joint architectural and engineering debate at the highest level and in the public interest.

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