

## Notes - Edge Debate 40

10<sup>th</sup> June 2010 - ICE

### **“The focus on carbon is hindering the effort to reduce carbon emissions”**

Chair: Paul Morrell, Chief Construction Adviser

Speakers: Guy Battle, Bill Bordass, Stephen Hill, Sunand Prasad, Bridget Rosewell

#### Presentations:

Guy Battle:

- Carbon is King
- A cross-disciplinary taskforce to focus on carbon is required
- A cross disciplinary carbon balance sheet should be established

Bill Bordass:

Slides:

<http://homepage.mac.com/aleaman2/UBToverflow/ConcentrationOnCarbon.pdf>

- Agrees with Guy but:
  - We are already living way beyond our means &
  - If we are not careful all that will be achieved is displacement activities
- Britain must show the way nationally:
  - The UK is using the equivalent of 4 Buncefields in fossil fuels a day (200 Buncefields globally)
  - Compare this with the Mexican Gulf oil spill of about 1 Buncefield (150,000 tonnes) to date
- Other important policy objectives:
  - Energy security
  - Biodiversity
  - Pollution and degradation
  - Cost-effectiveness, particularly now.
  - A better, more robust building stock.
  - Social objectives, including healthier indoor environments
- Short, medium and long-term plans are required
- There is a credibility gap between the predictions of BREEAM & designers and actual outcomes approaching x3
- Note that Carbon counting methodologies are not stable (CF R. Everett - The infuriating inconstancy of Carbon factors, Westminster Carbon Counting Conference)
- Unintended consequences
  - Token greenness
  - Zero-sum games
  - Carbon dumping
  - Dash to biomass
- Need to:
  - Engage people
  - Reduce demand
  - Increase efficiency
  - Avoid waste

- Decarbonise supplies
  - Get results by doing things simply, cheaply ... and well!
  - PREVENTION IS BETTER THAN CURE
- "Take one zero off your budget and creativity begins. Take two zeros off and you have sustainability ..."* Jaime Lerner, former Mayor of Curitiba, Brazil

Stephen Hill:

- We are at the limit of what we know
- Everything comes back to the **land**
- We need Regional Resource Plans and Thermal Master plans
- Imagine energy companies becoming wholesale land developers
- Good husbandry of land will lead to a return to effective land-use management.

Sunand Prasad:

- A cultural response is essential for tackling climate change
- We can game carbon but can game anything
- Carbon is the only credible outcome measure and therefore a global agreement is necessary
- Mistakes have been made: eg the B&Q windmills that will never make back the carbon cost of production & biofuels
- The idea of 'Carbon as Currency' is a very powerful tool

Bridget Rosewall:

- Coming from a different starting point
- Need to know
  - where are the price incentives &
  - how to harness markets
- Models of the economy and of climate can be compared and their usefulness and their flaws better understood
- Must understand the cost and benefits of projects
- Economic forces will bring climate change benefits whether or not people agree with the outcomes.

Debate:

The economic direction of BR needs to be grasped

Australia has no carbon budget

Need a real escalation in price of carbon and a recognition that it is happening

Building data in Australia is based on real measurement of savings achieved

The problem of producing wealth from carbon has given carbon a damaging value

No engineer has ever designed a system that is inefficient [hilarity]

If we can monetarise value of energy we will get results

Could think renewables through from current unthinking attitude to where carbon reduction from all sorts of inputs is captured in a single simple metric

Capitalism has given us new ways of innovating

The discussion about carbon has changed the lens. Now need to settle the price of carbon - the difficulty is getting it right

Management Consultancies very excited about counting carbon and commercial companies are getting to grips with it.

The metric has got to be carbon because of embodied carbon

Carbon is a good proxy

We have to target energy conservation first - before carbon counting!

A thinking approach to carbon is required not a dogmatic one

Chris Hope of the IPCC has worked out price of carbon at £75 per tonne

Don't wait till after it has happened!

Don't forget the very many other factors that are damaging the environment

Experience on the 2012 Olympics has shown we can innovate to develop low carbon solutions

But what happens when the grid is decarbonised? What value will carbon have?

Current energy regulation is stifling creativity

Current legislation controls intensity = stick, and carbon pricing = carrot

Why not tax carbon rather than trade it?

Concern about the engineering gymnastics involved

What is the carbon economist's version of quantitative easing?

Are carbon quotas likely/possible?

People at the top of the hierarchy have got to learn to say NO

Professionalism has been sacrificed to markets

Need return to assessing carbon intensity and the value of energy

There are opportunity costs

Count the carbon but not only the carbon

A behaviour change compared to cigarettes & smoking necessary

How do you change attitudes?

Carbon is a unifying metric

You've got to have drivers to force change

People need help to change

Carbon is a great global metric but does not provide a great personal metric for making day to day decisions

As a metric it is not scaleable down to the individual level. Metrics are needed that connect directly to using energy.

Real data needs to be put into the public domain

The beneficiaries of feed-in tariffs are the middle class

The focus on carbon has created excitement - zero-carbon even more.

We are getting close enough to do something with it.

Multiple measurements are inevitable for the time being but understanding is getting more mature and subtle

The demand has got to be brought down

Carbon is important but it cannot be the sole lens.

Land valuation?

Metrics must be found that produce traction in the right places. May be different metrics for different places

### Summing-Up:

- Government has to pay attention to embodied energy. It is possible to see it as being 50% of energy expended
- The competitive advantage is in getting rid of carbon not counting it
- Whole-life carbon is more powerful than whole-life cost
- It is about money and people but government ministers are looking for simplicity and they are aware that the issue of carbon never comes up on the doorstep when campaigning
- Intervention does not mean starting again
- If the measures we are adopting are not right what are the right measures
- Occam's Razor needs to be used to make sure things are no more complicated than they have to be

Notes SF Sept 10