Carbon Reduction: The Transition to a Low Carbon Economy.

29th November 2011.

The Brewery, The City of London.

Organised by: Govtoday
Sponsored by: 40 South Energy

Attended by around 400 delegates from governmental bodies, County and Borough Councils, Industry, Business, plus a few Community Groups and Faith bodies. Attending from the Diocese of Peterborough: Revd Robert Hill, Bishop's Officer: Mission in Society.

Programme:

09:20 Chair's Welcome – Krishnan Guru-Murthy

09:25 Carbon Reduction 2011: The Transition to a Low Carbon Economy
Stefaan Vergote, Head of Unit, Strategy and Economic Assessment, at the European Commission.

09:45 Panel Debate: The Challenge of Climate Change.
Chair: Krishnan Guru-Murthy
Stefaaan Vergote.
David Kennedy, CEO, Committee on Climate Change.
Dr Benny Peiser, Dir, The Global Warming Policy Foundation.
Prof. Steven Cowley, CEO, UK Atomic Energy Commission.
Chris Beck, R&D Specialist, UKTI.

10:55 Wave Energy for Communities.
Michael Grassi: Chair & CEO, 40 South Energy.

(11:15 – Coffee)

11:45 Master Class 1

12:30 Master Class 2

(13:15 – Lunch)

14:15 Master Class 3

(15:20 Afternoon tea)

15:40 Chair's introduction to the afternoon Plenary.

15:45 Best Practice Case Study 1: The Environment Agency
Simon Dawes, Internal Environmental Manager, Environmental Agency.

16:05 Best Practice Case Study 2: London Borough of Sutton.

16:25 Q & A with the two speakers above.

16:40 Chairman's Concluding Comments.

The following notes were made by Robert Hill. Transcripts and recordings of the presentations may be available for a limited time. Tel: 01536 523603 or email Robert.hill@peterborough-diocese.org.uk

09:25 Key Note Speech.

Carbon Reduction 2011: The Transition to a Low Carbon Economy

Stefaan Vergote [SV], Head of Unit, Strategy and Economic Assessment, European Commission.

Different views of the current situation give different perspectives. The global view sees that there is progress even though Copenhagen was not a success. The 2° objective has been agreed to by a number of key countries, but whilst there are reductions (emissions have gone down by 14%) the target will be missed if there is no change to the current commitment level. There is a need to identify clear policy options.

The EU has dedicated 20% of its budgeting to 'mainstreaming' Carbon Reduction activity, but current policies will only reduce it to only 40% rather than the 80% aimed for. Investments from private and public sectors will need to increase dramatically to fund R&D and product delivery. However, fuel savings will be of a similar magnitude plus there will be savings derived from better air quality and therefore reduced health costs. One area that needs development is that of 'Smart Grid' and clever distribution of energy. Up-front investment is the key problem.

09:45

Panel Debate: The Challenge of Climate Change.

Chair: Krishnan Guru-Murthy

- Stefaan Vergote. SV
- David Kennedy, CEO, Committee on Climate Change. DK
- Dr Benny Peiser, Dir, The Global Warming Policy Foundation. BP
- Prof. Steven Cowley, CEO, UK Atomic Energy Commission. SC
- Chris Beck, R&D Specialist, UKTI. CB

Q: Should economic stagnation affect our reduction plans?

DK: The UK is the first country to set comprehensive, legally binding reduction plans. 0.4% of GDP goes to it at present. This will rise to 1% by 2020. It is anticipated that Carbon Reduction will increase domestic fuel bills by £100 pa (at current usage) but this will be balanced by savings made in energy use. Only a small number of industries in this country use high amounts of electricity, so the UK will not go bust if electricity prices rise because of Carbon Reduction. The government of the day cannot go against the Committee Climate Change without good reason.

BP: The whole agenda is in crisis: There is no chance of agreement between nations. The EU has stated that it will not make any more unilateral undertakings without the rest of the International community. There is a Public and Industry 'backlash' at the whole agenda. Unconventional gas (Shale gas) is collapsing costs. The UK government has said it will no longer 'go it alone'. The political climate has changed, and Carbon Reduction is seen as a liability. If government disagrees with the Committee on Climate Change, it will simply abolish the Act

that forms the committee. The expected increase in economic pain will reduce the Reduction agenda. *[BP was heckled at points during his comments]*

SV: Sees the opposite to BP. Many nations (including China) are gearing up towards Reduction plans and controls that are similar to Europe's. We need to be realistic about the costs, but they are manageable. Energy security is important. With the increasing population figures and the increase in the number of cars on the roads, we need to prepare for a world where oil is scarce and expensive.

Q – to CB: How big a factor are energy costs to Business and Industry?

CB: Opportunities that come through new technologies are as important as energy usage.

Q – to SC: Will we end up with more Nuclear Power stations?

SC: It is wrong that so much is promised by developing technologies – they are just that: developing, not developed and not proven. We need to 'nail down' what we can from what we have already: eg. Nuclear power. There is a long lead time for changes to energy sources.

Q – to Chairman: Is the media unbalanced by putting up (eg on TV) one person for and one against an issue, where there maybe 99 for to 1 against in reality?

The Chairman said this wasn't a debate about the media, but noted that media presentation was changing to reflect the balance in the community on these issues.

Q – Distrust of 'men in suits' seems justified when no-one on the panel had mentioned 'insulation'.

BP: This debate is about "Go it alone" or "Wait for the world". Energy efficiency will only mean that people will use more. If fuel costs fall by half, people will drive 2 cars. People will just change their usage. *[Heckling from the floor at this view, plus a comment from a panellist who asked: Who could drive two cars at the same time?]*

Q – What should Councils be doing to change attitudes?

DK: Promoting smarter devises, transport systems, waste management, etc.

Q – How can we encourage ordinary people's confidence regarding the quality of the underlying science of Climate Change?

DK: There is room to improve governance regarding the publishing of reports. People easily doubt, and scaremongering is rift in some areas of the media. The challenge is about 'how to get the facts out there'. The Daily Express and Daily Mail were seen as having their own agenda.

SC: It is hard to predict when reports and studies will be published. There are now 10 times as many publications as there were 20 years ago, but there is a growing demand for a good standard of study.

Q – from the Chair to SC: Where are you in respect of keeping the public on-side? Will there be an increase in the number of sites for nuclear power stations?

SC: There will only be a need for a couple of new sites as the old ones will be re-used. The nuclear industry has had very few accidents and produces a lot of energy.

BP: Germany now fears nuclear power and is switching back to coal powered, with 25 plants being built.

SV: New technologies are getting more competitive.

Q – to SC: Are the costs of decommissioning Nuclear Power plants factored into the real costs of Carbon Reduction?

SC: The big costs are connected with the 1950's plants (£2.5B pa). The costs associated with the current fleet are/will be much less.

Q - With all the talk about wind and photovoltaic generation, how do we fill the gap when it's dark and there is no wind? Is there a place for the quick start-up coal dust diesel concept?

DK: There is a need for good Demand Management, but with our connections to the continent and the balancing of generation sources there should not be any major worry. Shale gas may be cheap, but it is not a low carbon solution.

Q – from BP to DK: Will the Committee on Climate Change advise the government against Shale Gas?

DK: The advice to government will continue to be: Do not give up on Low Carbon.

Q – The panel was asked to comment on the range of policies internationally.

SV: If every nation implemented different policies it will not be as effective.

Q – Where is Wave Power in the policies?

CB: Wave is part of the mix but it is still has some way to go. It is about 20 years behind Wind Power. We are only part way through developing the technologies we will use in the future.

SC: Marine energy will be a small but important part of the mix of energy supplies.

BP: Fossil fuels will continue to be a major source of energy because China and India have the resources and the demand.

DK: Suggested that we support Wave Energy to develop and see if it becomes cheaper.

SV: There is a need to be aware of the global pollution being created by the likes of China and India as their urban demands grow.

Q – What are the implications of Shale Gas – An economy built on Growth demands progress; and Shale Gas is cheap.

CB: Energy storage is going to be a key factor.

Q – What plans are there to encourage Small and Medium sized Enterprises [SME's]?

CB: We need to encourage SME's to become suppliers of new technology equipment rather than buy them elsewhere.

DK: Yes, we would do well to support SME's to consolidate their efforts.

10:55

Wave Energy for Communities.

Michele Grassi, Chair & CEO of 40 South.

Mr Grassi outlined his company's developments in Wave Energy production and how they are structuring the installation of such plants in communities: With communities owning part of that structure and gaining direct benefits as owners of the off-shore 'Park' where the installation is placed. Although Wave Energy generation is 20 years behind Wind Power, they hope that this is a more sustainable and consistent source as waves and water flow are more predictable than wind.

11:45

Master Class 1. – The Choices:

- Cut out the carbon through FM and CarbonCare
- Are your construction projects costing the earth?
- Rapid Energy Modelling – getting to grips with energy performance in your buildings.
- Wave energy for communities.

Rapid Energy Modelling:

Getting to grips with energy performance in your buildings, fast!

Sponsored by: Autodesk and URS Scott Wilson.

Presented by:

Robert Spencer – Head of Corporate Sustainability – URS Scott Wilson.
Adam Matthews – Industrial Program Manager, Autodesk.

This was (disappointingly) more of a sales pitch than a Master Class. The product being highlighted was computer software that took building profiles, dimensions, fuel usage, construction materials etc., and produced a battery of figures and diagrams that showed how much energy loss there was and where it was lost from. The Low Carbon Construction report was briefly discussed, noting that 70% of current buildings would still be in use by 2050, so upgrading the national stock of buildings was worth the effort. It was noted that there are enough Energy Engineers to assess the amount of buildings that could be assessed – therefore their computer modelling was an answer, especially as the model could build in projected climate changes.

12:30

Master Class 2. – The Choices

- Only by understanding the whole life cycle can you be truly sustainable.
- Energy Efficiency with LED Lighting.
- Restructuring the tender process: a winning proposition for both sides.
- Community engagement with renewable energy technology: facilitating behavioural change.

Community engagement with renewable energy technology:
facilitating behavioural change.

Presented by: A Lecturer from Staffordshire University.

The stated aim was to gain an understanding of the enablers, barriers and techniques to engage communities and householders (including vulnerable groups) in contributing to carbon/energy reduction.
The presentation started with the Trailer for 'Carbon Nation – The Movie' [see carbonnationmovie.com] as an example of what is being done to challenge old ideas with 'you don't have to believe in climate change': Economics (greed and survival) are strong motivators. Energy Security is a rising factor in people's minds, but there is a feeling of helplessness as 57% surveyed were environmentally active but felt that the major polluters (China, USA) were making their efforts insignificant.

Recent cultural changes seen as progress are now barriers. The 'Three C's': Comfort (eg. heating our homes), Convenience (eg. Car usage), and Cleanliness (eg. regular, long showers), need to be challenged.

Hassle factors, such as having to clear out the loft before insulation can be put in, militate against installation. The quick fix over-rides the long term solution. It was hoped that the governments 'Green Deal' and Big Society Thinking might, for example, encourage people to help those who need assistance to get insulated.

The current infrastructure and mind-sets do not assist. There are far more petrol pumps than Electric Car plug-in points. Photovoltaic panels put on social housing saw a massive increase in the household use of electricity, because it was considered to be 'free'. A recent study compared *'changing mind-sets about the main issues'*, with *'changing mind-sets to suit new technology'*. It found that people who thought primarily about the planet and not primarily about the technology were far more careful about their carbon use. [I hope I've put that clearly enough - RH]

The targeting of individuals has been the traditional approach over the last 25/30 years. There needs to be a change to default settings in society (the proposed changes to organ donor cards was used as an illustration).There is a cloud of change: Eg. Australians are now taking fewer and shorter showers, and some design companies check for carbon usage as a standard procedure.

The targeting of 'Trigger Events' is important: Eg. Moving house is a good time to lag the loft. Incentives such as decorating vouchers could be given to those who upgrade plumbing etc. Comparative consumption figures for neighbourhoods have been suggested – bringing in an air of competition within communities. [That would need careful thinking through!! – RH] It has been suggest that such competition could save 2% – 3% carbon.

The targeting of communities of all types and styles was also identified. Bulk-buying and 'Smart Mobs' (shopping groups), along with neighbourhood action groups could be encouraged and supported – again building in a competitive spirit where appropriate. Refurbishment of Community Halls and public areas.

The Business communities were not forgotten. The Helsinki Green Office Club was highlighted, which praises good practice in Buisness.Thefuntheory.com was also noted and one of their short videos was shown.
[http://www.youtube.com/watch?feature=player_embedded&v=zSiHjMU-MUo]

There are plenty of studies in this area but they need to be pulled together.

From a time of Q&A:
Whilst techno-fixes are good, (eg car plug-in points) solutions need to be found where things aren't so easy. Eg. You can't plug your car into your home if you live in a third-floor flat with no parking outside.
At the present, Green adverts in the media are vastly out-numbered by those of consumerism. There is a need for coherent programming of campaigns.
Food issues are more than 'bulk-buy' issues. In Stoke, only one piece of fresh fish is sold for every 7 from a fast-food take-away. In Detroit, derelict industrial land has been dug over to create allotments.

There is a lot of 'Green Wash' from the present generation of Corporate CEO's: There is little chance to work with them other than through greed based incentives. There is real hope that things will be better in the next generation that will have to take note of share-holder pressure.

14:15

Master Class 3. – The Choices.

- Applications for Renewable Heat Technologies.
- What Intervention? What Building? Making the right sustainability Choices.
- Data centre efficiency, best practice & low cost solutions.
- The role of lighting in a livable city.

What Intervention? What Building? Making the right sustainability Choices.
Sponsored by: Sefaira.
Presented by:

Mads Jensen – CEO Safaira
Varun Singh – VP Engineering, Sefaira
Alan Asbury – Sustainability Team Leader, Aylesbury Vale District Council.

This was combination of a sales pitch and a presentation about how Aylesbury Vale District Council benefited from new software to help make the right decisions for energy savings and carbon reduction with respect to the buildings in their portfolio.

It was noted that the only way to get more than 10 – 15% reduction will be through changing behaviour and increasing off-setting through corporate activity. Ronald Regan once said: You can accomplish anything, if you don't mind who takes the credit.

AA (Aylesbury Vale Council) told of how detailed examination of bills for services (such as water for the fountains) identified waste and excess costs which were reduced, but these were the easy stages. Carbon priority buildings had been identified and were to be targeted. There was also a benefit in standardising saving

calculations. [All this was based on having control of your building portfolio, which, as a diocese, we do not. – RH]

15:45

Best Practice Case Study 1: The Environment Agency.
Simon Dawes, International Environmental Manager, Environment Agency.

SD outlined the targets that the Environment Agency is aiming for.
'A good plan today is better than waiting for a perfect plan tomorrow.'

The question was asked as to "how have we just got so soft to expect 'perfect'", such as expecting building temperatures to be between 19° and 26°? This is simply a waste. To get beyond the 2015 targets we need to think differently.

The 'willowing' of riverbanks was given as an example of old sustainable crafts being reused to manage the countryside.

16:05

Best Practice Case Study 2: Sutton Borough Council.
Presented by Sean Brennan: Leader, London Borough of Sutton.

It was noted that some councils and government departments are down-playing Carbon Reduction issues now! But councils can be positive leaders in Carbon Reduction.

The 'One Planet living' approach (WWF) was highlighted. It was pointed out that Sutton Council had reduced their Carbon by 8% through a local team of Environmental Champions. 'Green Schools' were being encouraged. Councils should show leadership to encourage all parts of the community to get involved.

A partnership with B&Q had been set up by one council with discounts at B&Q for groups and individuals that engaged with reducing their carbon emissions.

16:25

During the Final Q&A session.
The representative from Friends of the Earth challenged councils attending the conference to 'tell it as it is' regarding what would happen if no action was taken to reduce Carbon emissions.

One speaker noted that Tesco's recycling and waste levels had been radically turned around because of the CEO's young daughter being taught about Carbon Reduction at school and then moaning to her dad.

The conference ended with the glossy, printed feedback booklets being gathered in; one of which was drawn out with a prize of a new, high spec, lap-top computer.