

25th September 2003

Building defences against the coming storm

Terry Wyatt, President of the Chartered Institution of Building Services Engineers, opened a major conference on sustainability and buildings in Edinburgh on 25th September by offering a stark warning on a major threat to our lives and lifestyles.

He said:

“A storm is coming and we’d better be ready for it.

“That’s why my message to you at the beginning of this conference is to stress that sustainability isn’t just a trendy fad, or a criteria box you can tick to keep a few fussy clients happy. Sustainability is right now fundamentally about acting for our survival as a human race and ensuring that we can have a decent quality of life across the globe. And with buildings consuming around half of all commercial energy and producing 50% of global carbon emissions, it’s an issue where we as an industry are ideally placed and singly more obligated than any other industry to provide the solutions and point the way to an energy efficient, low carbon future.

“This summer wasn’t just about the unusual weather we’ve had in the UK. All the way across Europe; extreme temperatures have been experienced, a 20% fall in food production, and 15,000 excess deaths of the elderly in France alone through heat exhaustion. Remember too this is barely a year since major floods devastated many parts of Europe. If you care to track these extreme events across the globe then, what we have been experiencing in Europe, is not the exception. Record highs on temperature, increased frequencies of high rainfall and flooding, and unusual events. Today is warmer globally than we have ever been before, at a time when natural climate variability trends says that we should be significantly colder.

Mf/...

2/...

“John Houghton, former head of the UK Meteorological Office and co-chair of the IPCC, the international scientists advising the world’s government on climate change, concluded last month that: “I have no hesitation in describing (climate change) as a "weapon of mass destruction". He went on to say that: “Like terrorism, this weapon knows no boundaries. It can strike anywhere, in any form - a heatwave in one place, a drought or a flood or a storm surge in another. Nor is this just a problem for the future. The 1990s were probably the warmest decade in the last 1,000 years, and 1998 the warmest year. Global warming is already upon us.

“The World Meteorological Organisation warned this month that extreme weather events already seem to be becoming more frequent as a result. The US mainland was struck by 562 tornados in May (which incidentally saw the highest land temperatures globally since records began in 1880), killing 41 people. The developing world is the hardest hit: extremes of climate tend to be more intense at low latitudes and poorer countries are less able to cope with disasters. Pre-monsoon temperatures this year in India reached a blistering 49C (120F) - 5C (9F) above normal. And before this killer heat-wave began to abate, thousands lay dead. Taken altogether; ‘Climate Change’ related deaths far exceeded those from terrorism.

“Yet as far as our political leadership and the general public are concerned we seem to be in denial, enjoying the calm before the storm to come and simply not facing up to the changes we will have to make in the way we organize our economies to effectively move to a carbon neutral future. And yes, I fully acknowledge the vision and rhetoric of our Prime Minister in adopting a 60% CO2 reduction target for the UK. We have gone further than many countries in starting on the long path to dramatically reducing carbon emissions. And yet, knowing what is facing us with inaction, the response so far has still been tentative and limited. We can and need to do a lot more and fast.

Mf/...

3/..

“Now as you may know I am not a man prone to negative thinking – in the end you have to believe that we can change and make a difference or why bother people with speeches and your concern? However, I would not be doing my job as President of CIBSE and co-chair of this conference if I simply made a few bland statements about sustainability. We need to be clear on our role in this turbulent future and what we need from Government to allow us to deliver on solutions.

“The good news is that our industry is THE solution to climate change and greenhouse gas emissions. To appreciate what this means; I think the scene for the problem and its challenges will best be seen from a few illustrations:

“Undoubtedly our industry can play an important role through education, information and leadership. But Government too must play its role. We’ve pledged our commitment to partnership with Government, but to make that real the pace must be picked up by them and some hard decisions taken.

“The UKs Energy White Paper had superb vision and good analysis. The pace of delivery of its core message however is way too slow. Of course you need to give industry early warning of changes to regulations and standards, but not at the sometimes glacial pace we seem to be travelling. So let me be specific on just a few things that could make a difference and allow us to do our bit. I’m taking them from the draft of our implementation proposals that we will be delivering in march next year:

1. Make the aspirational 20% renewables target legal and give a clear signal that the renewable growth doesn’t stop in 2010. The problem with the current 10% target is that it has become a ceiling and not the target, and the delivery will be well below this because companies are incentivised to opt for smaller renewable outputs at high prices and profits. Make the 20% target by 2020 clear and legal and watch that change overnight so that UK renewables capacity rises rapidly.

Mf/...

4/...

2. Cheap energy has been a mantra for 15 years in this country. Its days are numbered and prices are already rising – a point made honestly by the Minister at a recent Fuel Poverty conference. The current low electricity prices – (well, for the commercial sector anyway as most of the cost savings were never passed on to the domestic consumer) – are simply unsustainable and will end soon. Pressure on gas prices is relentless and don't expect the Russian gas companies to offer cheap fuel as our own supplies begin to diminish. And what will we trade to buy it with anyway.
3. Make sure that PFIs have to adhere to the best standards of low carbon construction and energy supply. With hundreds of schools, hospitals and other buildings coming via PFI this is essential if we are not to build up a long legacy of polluting, minimum standard buildings for the future. Life cycle analysis is the key here, yet too often PFI is all about keeping capital costs low without much concern about running costs. That's old school thinking and should have no place if the Government truly believes in its 60% carbon reduction target.
4. Get a move on with regard to the introduction of the EU Buildings Directive. We are running perilously close to the introduction of this legislation and yet internal government battles are delaying agreements on the scope of the Directive so that the building owners and users don't know what they have to do and when. But we certainly applaud the government in recognising the fundamental need to immediately up-grade the Part 'L' of the building regulations in pursuit of building energy efficiency. A keystone to achieving the White Paper.

“Sustainability means acting now, not later. In the construction industry we accept responsibility for 50% of global carbon emissions and we know what we have to do to cut that in half before we even get onto more radical design and operational solutions. No more warnings are needed; -Let's get moving- today.”

ends

Notes to editors

1. Terry Wyatt is President of the Chartered Institution of Building Services Engineers, a Chartered Engineer, a Member of the Institute of Energy and a partner at Hoare Lea Consulting Engineers since 1982 where he is currently Head of Research and Development. He has been an internationally-recognised innovator of building services engineering over many years. His best known achievement is the development, introduction and naming of chilled ceilings and beams which are an innovative and energy efficient alternative to cooling buildings by conventional air conditioning plant. The system has now been adopted by leading air conditioning manufacturers in Europe, North America and Australia and chilled beams are now widely used in new building design.

Mf/...

5/...

The main research area he is currently working on is the mitigation of climate change by reducing carbon dioxide emissions from buildings: buildings account for over 40 per cent of global CO2 emissions.

He has also been dedicated to passing on his knowledge to new generations of engineers, having lectured at colleges and universities in the UK, USA, Brazil, China, Holland and other European countries. As president of CIBSE he has spoken at numerous international conferences this year and he still finds time to lecture on building services to UK students. He has also been the driving force behind the CIBSE/ASHRAE conference on Building Sustainability in Edinburgh (24-26 September 2003) on attended by over 600 leading engineers and scientists from around the world.

2. The Chartered Institution of Building Services Engineers is the professional body for building services engineers and other specialists involved in a broad range of activities within the built environment. More details are available at www.cibse.org. ASHRAE is the American Society of Heating, Refrigeration and Air-Conditioning Engineers: details are available at www.ashrae.org.

For further information contact:

Leon Price
Public Relations Officer
CIBSE
Tel: 020 8772 3645
Email: lprice@cibse.org
Ref: 03/09/19