On 3 May, the Edge held the last of a series of three debates on energy and climate change. As a result, the Edge urges the built environment institutions to make Contraction and Convergence a core concern, given their wider duties of public care.

Rising concentrations of greenhouse gases in the atmosphere drive climate change. The principal culprit is carbon dioxide, CO2. It is now generally agreed that there should be an upper limit on CO2 concentrations. The Prime Minister asked scientists how much: at the Exeter conference in February 2005 they said 400 parts per million by volume (ppmv).

Above 400 ppmv, the possibility of runaway global warming can't be ruled out. This could mean 50°C surface temperatures, few plants outside the polar regions, and perhaps hundreds of thousands of years for the climate to recover. Mutually Assured Destruction, to use a phrase from the Cold War. And we where are we now? 380 ppm in 2005 and rising at some 2 ppm per year, so perhaps a decade from the possible tipping point.

And is the world beginning to stabilise its CO2 emissions? No, they are accelerating. Sir David King, the Government Chief Scientist, thinks that we will overshoot by 150 ppmv and that, without adaptation, the consequences could include around 400 million deaths. However, if we are lucky, the tipping point might be a bit further away. If we act with urgency we might be able to stabilise, say at 450 ppmv. And stabilise we must.

The global problem can only be solved by coordinated international action. We have all got to share the cut in emissions. This has to be negotiated. The problem is how. Kyoto has been a good start but it is inadequate. It is soon to expire, its targets bear no relation to the task in hand (e.g. looking for 10% savings when something more like 90% is required) and many countries are not meeting them anyway.

Kyoto does not include some key players, e.g. USA, China, India and Brazil. We need a new system that all countries will adopt. If any country does not sign up, then carbon-intensive industries are likely to move there. The basis for an international agreement has to be seen as fair by all signatories. Cutting to the chase, it may well have to be on the basis of population. China is effectively arguing that since the industrial revolution '95%' of the atmospheric resource has already been taken, largely by the West, she and other developing nations should have larger share (i.e. per capita plus) of the remaining '5%'.

This is what Contraction and Convergence (C&C) is all about. Contraction is progressively reducing global emissions to meet a maximum level, say 450 ppm. Convergence is a programme to move towards an equal share per inhabitant of the planet. This means that individuals in the developed countries will need to reduce their emissions by a factor of typically between five and ten, while those in developing countries have a chance to grow.

C&C could be the road map for a treaty to replace Kyoto. Economies that depend on lots of carbon will have to find ways to reduce it. C&C shows how the negotiations can arrive at the point when it becomes clear who has to do what. Pain cannot be avoided, but there are many opportunities to reduce our wasteful use of energy and the CO2 impact of our energy supplies. The longer we leave it the more painful it becomes. It is about who pays: us or our children. Grandchildren should be regarded as only a theoretical possibility.

There is a lot of support for C&C being the basis for the successor treaty. The New Scientist has described it as Kyoto Plan B. The UK's Royal Commission on Environmental Pollution and the German Advisory Council on Global Change have recommended it to their respective governments. The Africa Group of Nations has formally proposed it to the UN where it has been ratified. The European Parliament passed a resolution in favour of C&C in 1998, it has been codified as a bill before the UK Parliament (second reading 1 June 2006). The Lib-Dems, [spelling of Welsh Party] and the Scottish Nationalists all advocate it.

The importance of C&C came as the conclusion to three Edge Debates on energy – supply, demand and balance, and was introduced by its main advocate Aubrey Meyer. But how can we bring it down to earth? In this talk of international agreements, how can the Edge (a ginger group of professionals with an interest in the built environment) in the UK (a small country which currently releases 2% of the world's CO2) really make much of a difference?

As it happens, quite a lot. The UK can show leadership, not just on the international stage, but at home by demonstrating how a developed country can reduce its emissions whilst maintaining the health and well-being of it population. And everybody can help in this – as Lord Oxburgh said at the third Debate, a personal response is the fastest and cheapest way of reducing carbon dioxide emissions.

But what about the Institutions, particularly the built environment ones which are the first point of contact for the Edge? Far from being remote and beyond their influence and concern, participants argued that the Kyoto successor treaty was central to all that they hope to achieve, given their wider duties of public care. As global bodies, they can play an important part in the coming debate and show the way to appropriate solutions. Otherwise, it would not be long before people began to ask: "why weren't they prepared" and "why did they continue to encourage investment in the wrong things?".

The chairman took a vote on whether the institutions should put C&C on their high level agenda and make it absolutely core to all they were about. The support was unanimous. If they were to do so, the institutions would be following in the steps of AWG, BAA, BP, Cisco Systems, F&C Asset Management, HSBC, John Lewis Partnership, Johnson Matthey, Scottish Power, Shell, Standard Chartered Bank and Sun Microsystems who all wrote to the Prime Minister last year asking for a world leading climate change policy framework for the UK.

We need to resolve a 'Catch 22' situation on climate change between the private sector and government. Government feels limited in its ability to introduce new policy because its fears business resistance while, the absence of long-term policies, companies are unable to scale up investment in low carbon solutions. In the discussion afterwards, several people tried to identify the downsides for the institutions, but nobody came up with anything. It will be interesting to see how the institutions respond.