

## **Let's make sure the message is clear and urgent - we're over the emissions limit**

Maybe we passed the only truly safe limit about 250 years ago when industrialisation was just starting and, with only some 278 ppm of CO<sub>2</sub> in the atmosphere, the Earth was 0.8°C cooler than at present. Today's rather unsafe limit, the limit accepted by the UN, EU and most mainstream climate campaigners, means preventing the Earth's average temperature from rising more than 2°C above its pre-industrial level. Around 2°C, many scientists fear dangerous or catastrophic climate change. Even the 0.8°C increase is having very worrying effects as primary and secondary feedbacks appear to be kicking in 20 to 30 years ahead of prediction.

The problem for campaigners is that every time anybody says "Global greenhouse gas emissions must peak by 2015 to stay below 2°C" or "We need an average cut by 2050 of around 90%" or "There's only 17 ppm of CO<sub>2</sub> to go before we reach 400 ppm of CO<sub>2</sub>" the public tends to say "Oh well, we don't have to act just yet". The fact is, we've run out of time. We have to act now.

In 2005 the Hadley Centre, in the summary to Avoiding Dangerous Climate Change said "stabilisation at 450 ppmv CO<sub>2</sub>-equivalent would imply a medium likelihood (~50%) of staying below 2°C warming." The IPCC adds some 21% to CO<sub>2</sub> to calculate CO<sub>2</sub>-eq. The present concentration is 383 ppm CO<sub>2</sub> which translates to 463 ppm CO<sub>2</sub>-eq.

The rate of emissions is increasing rather than shrinking. In the 1960s, atmospheric CO<sub>2</sub> concentrations increased by 1 ppm each year. In the past six years, they have been growing, on average, by 2 ppm annually. That rate of increase may rise - even if fossil fuel emissions are reduced - because warmer sea water absorbs less CO<sub>2</sub> and the world's forests will absorb less if large areas are cleared. We are already well into the danger zone and beyond any limit that we can be sure is safe.

Now that the scientific argument has been won and there is irrefutable evidence that the world is warming dangerously the public is ready for determined action. And what is that action? We have to cap emissions, cut them back, and share them equitably - now - and make sure that is the message.