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Long, detailed, impressive - but futile in the face of runaway climate change

This environmental state of emergency demands a bolder answer than Lord Turner's. We could start by taking six critical steps



[George Monbiot](#)

Lord Turner has two jobs. The first, as chair of the Financial Services Authority, is to save capitalism. The second, as chair of the committee on climate change, is to save the biosphere from the impacts of capitalism. I have no idea how well he is discharging the first task, but if his approach to the second one is anything to go by, you should dump your shares and buy gold.

His climate change report, published yesterday, is long, detailed and impressive. It has the admirable objective of trying to cap global warming at two degrees or a little more. This, it says, means that greenhouse gas pollution in the UK should fall by 80% by 2050 and by 31% by 2020. But there's a problem. **There is no longer any likely relationship between an 80% cut and two degrees of warming.** This gets a little complicated, but please bear with me while I explain why Turner's proposal is about as likely to stop runaway climate change as the Maginot Line was to hold back the Luftwaffe.

The 80% cut he recommends for the UK more or less matches a global target of 50% by 2050. A 50% global cut, the report says, would make roughly two degrees of warming a "central expectation" and would reduce the probability of four degrees (which it calls "extremely dangerous climate change") to less than 1%.

Turner claims that to keep the temperature rise close to two degrees, the world's greenhouse gas emissions must peak in 2016 then fall by either 3% or 4% a year. A 3% rate of decline is most likely to deliver a temperature rise of 2.2 degrees this century; a 4% annual cut would produce about a 2.1 degree rise. That's more or less consistent with his 2050 targets.

So far so good. But a recent paper in the Philosophical Transactions of the Royal Society, using the same sources, comes to completely different conclusions. It agrees that to deliver a reasonable chance of preventing more than two degrees of warming, greenhouse gases in the atmosphere need to stabilise at a maximum of 450 parts per million, carbon dioxide equivalent (ppmCO₂e). But it shows that to achieve this, global emissions of greenhouse gases from the parts of the system we can control need to peak by 2015, then fall by 6%-8% a year between 2020 and 2040, leading to "full decarbonisation sometime soon after 2050". Even this, it shows, relies on an optimistic reading of the current data. Turner's suggested cuts are more likely to produce four degrees of warming than two degrees.

The difference between the two reports comes down to this: Turner assumes that greenhouse gases can rise to 500 ppmCO₂e before falling back to 450. The other paper shows that this is a dangerous assumption. Not only does this mean that the cut comes far too late but, far from falling back, the enhanced levels in the atmosphere are likely to trigger more emissions as the biosphere starts producing more greenhouse gases than it absorbs. We cannot afford to overshoot.

Last week a paper published in Geophysical Research Letters produced what could be the first hard evidence that runaway global feedback has begun. In 2007 methane levels in the atmosphere, which had previously levelled off, began rising again. The most likely reason is that the Siberian permafrost is melting, as a result of the runaway warming of the Arctic. This wasn't supposed to begin for another 80 years. The great global meltdown appears to have started, yet Turner proposes that we carry on with the old plan as if nothing has changed. We're still digging trenches, even as the sky fills with bomber planes.

My reading of the new projections suggests that to play its part in preventing two degrees of global warming, the UK needs to cut greenhouse gases by roughly 25% from current levels by the end of 2012 - a quarter in four years. But how the heck could this be done? Here is a list of measures that could be enacted almost immediately. They require no economic or technological miracles; but they do demand that the government is brave enough to govern.

- 1 Immediately renegotiate the European Emissions Trading Scheme, imposing a lower cap on carbon pollution and the mandatory sale of all emissions permits to the industries covered by the scheme (currently over 90% are given away).

- 2 Use the money this raises for:

- a. A crash programme for training builders. As the major component of a green new deal - delivering jobs as well as carbon cuts - the government will immediately launch training schemes for tens of thousands of specialist builders, insulators, window-fitters, plasterers and decorators.

b. A home improvement scheme like Germany's, but twice as fast. Every year between January 2010 and 2020, 10% of homes will be fully insulated and fitted with good windows or secondary glazing, at state expense. Landlords will have a legal obligation to join, or lose their right to take tenants. Announce that when the scheme is complete, gas and electricity bills will be subject to an escalating tariff: the more you use, the more you will have to pay for every unit.

3 Announce that incandescent lightbulbs will no longer be sold in the UK from next April. Announce that no fridge or freezer with an energy rating below grade A++, and no other appliance rated below grade A, will be sold from next July.

4 Increase vehicle excise duty for the most polluting cars to £3,000 a year (from the current £400). Use the money this raises to:

a. Start closing key urban streets to private cars and dedicating them to public transport and cycling.

b. Increase the public subsidy for bus and train journeys. Oblige the bus companies to sign contracts providing a wider range of services. Give us the integrated low-carbon transport we have long been promised, in which buses are scheduled to meet trains, buses and trains carry bicycles, and safe cycle lanes connect with each other across entire cities.

c. Train thousands of new coach drivers and public transport operators. Create coach lanes on all motorways and start moving coach stations from the city centres to the motorway junctions, to enable coach travel to become as fast and efficient as car travel. Link them to city centres with dedicated bus lanes.

d. Scrap the airport expansion programme. Set a cap on the number of landing slots, which will fall every year until it reaches 5% of current capacity.

5 Stop the burning of moorland because this exposes and oxidises peat. Grouse shoots (which are mostly responsible) produce a staggering proportion of the UK's emissions.

6 Stop all opencast coal mining and rescind planning permission for new works. Impose stonking taxes on the extraction of all fossil fuels.

Is this enough? No. But it puts us on the right track. It's all a gamble from now on: the only reliable advice is that we shouldn't start from here. But two decades of procrastination ensure that only emergency measures now have a chance of preventing a climate disaster. What Turner's report - polite, measured and impressive as it is - proposes is more procrastination.

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