

Resolution on Negative Emissions Technologies

The CCC understands that emissions of greenhouse gases to the atmosphere must be limited in order to moderate climate change. However, the current dependence of the global economy on fossil fuels, past emissions, and lags in the climate system, mean that any conceivable roll-out of low-carbon energy technologies is unlikely to be fast enough to contain climate risks on its own. A zero-carbon society, even if it came into existence immediately, would still need to lower existing greenhouse gas (GHG) concentrations in the atmosphere.

The IPCC mitigation report argues for massive research and development into technologies which can potentially reduce GHG concentrations in the atmosphere, either by reducing emissions or by capturing them later. These could include battery improvements, geothermal technologies, solar PV, air fuel synthesis, carbon capture and sequestration (CCS), artificial trees, cloud brightening and artificially rapid weathering of rocks. The IPCC does not rule out exploring the possibilities of developing technologies which draw down GHGs from the atmosphere. There is a need to find and develop such technologies in order to give humanity the broadest possible range of options.

In global terms the amount of resources that has gone into such climate R&D is minuscule. George Monbiot points out that by March 2009, the US Federal Reserve had committed \$7.77 trillion to the banks. That is just one government's contribution, yet it amounts to 12 times the annual global climate change bill. On just one day the Federal Reserve made \$1.2 trillion available – more than the world has committed to tackling climate change in 20 years. To quote the Conservative MP Tim Yeo, it is as if government has decided to cut investment in building Spitfires at the outbreak of the Second World War.

Research does not mean that technologies in themselves should be further developed. Therefore the CCC supports the call for massive investment into research and development of technologies which can reduce and draw down greenhouse gas emissions.

Proposed Peter Robinson

Seconded Reg Hand