

Briefing

Equity - the elephant in the room

Why climate scientists must identify why equitable sharing of the remaining carbon budget is essential and what it means for nations and individuals

On November 2nd 2014 the Intergovernmental Panel on Climate Change (IPCC) published a report synthesizing its massive reviews on the science of climate change. It drew on the reports of three working groups looking at: 1) the physical science, 2) impacts, vulnerability and adaptation and 3) mitigation options globally and across sectors. Friends of the Earth has published a short summary of all three reports¹ and a longer summary on each^{2,3,4}.

The final IPCC report is agreed by governments ahead of publication.

Friends of the Earth welcomes the synthesis report but is critical that it failed to address the importance in significantly reducing carbon pollution inequalities in order to avoid dangerous climate change. They should have at the very least identified how the remaining carbon budget – the limited quantity of carbon pollution that can be released in order to avoid dangerous climate change – could be shared fairly and equitably between countries.

Whilst tackling climate change and addressing inequality is ultimately a moral and political issue for global citizens and our political representatives, climate scientists can help inform debate through providing unbiased information. Because they failed to do so, equity remains the 'elephant in the room'.

The backdrop to the publication of the IPCC report was the disastrous decision by EU political leaders to adopt a miserably low target of 40 per cent cut in greenhouse gas emissions by 2030, a target lambasted for its inadequacy by leading climate scientists including Professor Kevin Anderson⁵. This was echoed by the Vice Chair of the IPCC, Professor Jim Skea, who also said the "4 per cent for 2030 is too little too late if we are really serious about our long-term targets." The target fails to take into account the EU's historical contribution to climate change, its greater capability in terms of reducing emissions, and it hands EU countries a larger share of the remaining carbon budget than is fair⁶.

The IPCC identified the size of the remaining carbon budget for avoiding dangerous climate change⁷. Friends of the Earth believes that it now needs to now complete an equity report within twelve months, which shows how the remaining carbon budget could be shared out

For more than 40 years we've seen that the wellbeing of people and planet go hand in hand – and it's been the inspiration for our campaigns. Together with thousands of people like you we've secured safer food and water, defended wildlife and natural habitats, championed the move to clean energy and acted to keep our climate stable. Be a Friend of the Earth – see things differently.

between countries, based on the principles of the UNFCCC Convention and whilst meeting developing countries legitimate aspirations to provide their people with well-being⁸. In other words, how the budget can be shared fairly and equitably. This should inform the important international climate talks in Paris at the end of 2015.

They should also identify the implications of meeting the carbon budget for the lifestyle of the billion or so individual high emitters who are responsible for the vast bulk of emissions.

The result of such an exercise is that it will expose that the recently announced EU target and USA's power sector target⁹ are very far from what is needed, or what is fair.

Why equity is critical

Not only is the need for an equitable approach to reducing greenhouse gas emissions enshrined in legal agreements on climate change – particularly through the “common but differentiated responsibilities” principle – but with such a small remaining carbon budget it is inevitable that the largest polluting countries (as measured by average per capita emissions and historical responsibility) must reduce their emissions by the greatest amount and very rapidly.

And as Professor Kevin Anderson argues, it is no longer possible for these countries to adequately reduce emissions only through switching from fossil fuel energy to low carbon energy supply. Due to time constraints they will also need to reduce their consumption, particularly of energy¹⁰, says Anderson.

Yet much of the world's population is locked into poverty. The IPCC identified that the top twenty per cent of the world's population receive four-fifths of the world's income yet the bottom twenty per cent have one per cent. Those at the bottom will need to increase their emissions if they are to live lives of dignity.

The IPCC's estimated carbon budget for a “likely” chance of not exceeding the 2 degree target, range from around 600 to 1200 billion tonnes of carbon dioxide (GtCO₂) for the period 2011-2100, of which almost 150 billion tonnes have been emitted in the last four years. In other words, the global carbon budget – even for the high two degree limit - is reducing fast and living within it will require the global elites who are the highest polluters to rapidly reduce their emissions while enabling the poorest to access to essential infrastructure, some of which will require carbon emissions to increase.

Researchers from Princeton Environment Institute have previously suggested the introduction of a minimum emissions level per person globally (a poverty provision) and a ceiling for the maximum in order to keep within the carbon budget. This ceiling would, they say, require significant reductions by the billion or so responsible for over 50 per cent of global emissions¹¹.

The IPCC, in their report, should make recommendations to governments for minimum energy and per capita emission levels in order for all the world's citizens to be able to live a dignified life, including achieving development goals. It should also lay out the implications for the highest individual polluters who are over consuming more than their fair share (potentially recommending a cap for high individual polluters).

Why redistribution of wealth from rich countries to poor countries is necessary

Tackling climate change is ultimately a problem of the global 'commons' - and as such requires global solutions that tackle climate change in every country. The IPCC working group 3 report on mitigation identified that the financial costs of delivering even a 50 per cent chance of avoiding 2 degrees warming would be in the order of \$800 billion per year¹, with the majority of finance needed in developing countries. It said transfers of hundreds of billions of US dollars to developing countries *is likely* to be necessary, but fell short of saying this redistribution of wealth between rich and poor countries absolutely *is necessary*. Friends of the Earth with the support of the Stockholm Environment Institute and others have also identified the need for very large sums of cash to be redistributed from wealthy to poorer countries to help them grow cleanly. Our study on an equitable sharing of the carbon budget can be found at www.climatefairshares.org

The IPCC also say much of the spending on adaptation will be required in developing countries, with current spending orders of magnitudes lower than necessary. The IPCC say they have little confidence in estimates which suggest that only \$70-100 billion per year is required for adaptation by 2050 because these figures miss out important categories of expenditure. For example, they exclude extreme weather events or losses of ecosystems. The IPCC does not give an alternative figure but clearly implies much greater sums are required, and implies that much of this will need to come from richer countries.

In the Technical Summary of the Working Group 2 report, it identified that *“climate-resilient development pathways will have only marginal effects on poverty reduction, unless structural inequalities are addressed and needs for equity among poor and non-poor people are met”*.

Conclusions

Avoiding dangerous climate change will require substantial and sustained cuts in greenhouse gas emissions. In Friends of the Earth's view it is inconceivable that these cuts can be made without very large transfers of finance to developing countries from developed countries, and without the wealthiest in society substantially reducing their own emissions.

Friends of the Earth believes that a moral position - that values all people equally, regardless of place of birth or level of wealth - requires the world to aim to keep global temperatures to no more than 1.5 degrees warming. We believe **the IPCC must within 12 months complete an equity report that recommends how the remaining carbon budget should be shared between nations, based on UNFCCC principles and whilst enabling all people to have well-being. In addition the IPCC must go further and identify the implications of meeting the carbon budget for the billion or so individual high emitters who are responsible for the vast bulk of emissions.**

¹ Higher amounts would be needed to avoid 1.5 degrees of warming. But these are critical investments for the future of both our planet and its inhabitants. The figures are of course dwarfed by the \$1.7 trillion spent annually on military expenditure or the \$11 trillion spent on addressing the financial crisis since 2008.

References and notes

¹ Friends of the Earth (2014), Climate Change – ten key findings from the climate scientists. Summary of the three reports by the Intergovernmental Panel on Climate Change <http://bit.ly/1truqwJ>

² Friends of the Earth (2013), Climate change, what the scientists say, <http://bit.ly/19iaW3J>

³ Friends of the Earth (2014), Climate change, poverty and environmental justice, <http://bit.ly/1fPRfOA>

⁴ Friends of the Earth (2014), Climate change mitigation, what the scientists say, <http://bit.ly/1g4QnG9>

⁵ Kevin Anderson (2014), Letter to the PM outlining how 2°C demands an 80% cut in EU emissions by 2030, <http://kevinanderson.info/blog/letter-to-the-pm-outlining-how-2c-demands-an-80-cut-in-eu-emissions-by-2030/>

⁶ Friends of the Earth (2014) Paris 2015, A fair global climate deal: the role of the UK <http://www.foe.co.uk/sites/default/files/downloads/paris-2015-fair-global-climate-deal-48137.pdf>

⁷ Dangerous climate change is defined by most wealthy countries as 2 degrees of warming compared to pre-industrial levels, but at 1.5 degrees by most developing countries, which will bear the brunt of climate change impacts.

⁸ This has been visually represented by Kate Roworth at <http://www.kateraworth.com/doughnut/>

⁹ Kevin Anderson (2014), An inconvenient truth, US proposed emissions cuts too little too late, <http://kevinanderson.info/blog/an-inconvenient-truth-us-proposed-emission-cuts-too-little-too-late/>

¹⁰ Kevin Anderson (2014) An interview with Kevin Anderson, Rapid and deep emissions reductions may not be easy but 4°C to 6°C will be much worse, <http://transitionculture.org/2012/11/02/an-interview-with-kevin-anderson-rapid-and-deep-emissions-reductions-may-not-be-easy-but-4c-to-6c-will-be-much-worse/>

¹¹ Chakravarty, 2009, Sharing global CO₂ emission reductions among one billion high emitters, PNAS, July 21 2009, vol. 106 no. 29, 11884–11888, doi: 10.1073/pnas.0905232106