

KEY INTERVIEW: DR JOE BLAKEY

Dr Joe Blakey is a Lecturer in Human Geography at the University of Manchester. His research interests include carbon accounting and politics, governance, sustainability and zero-carbon cities. He is also a member of the Manchester Zero Carbon Advisory Group, and leads the sub-group on indirect emissions.



What is a carbon budget (yes, you're allowed to use the diet analogy), what is Manchester's budget and how are we doing on keeping to it?

“It’s a well-worn analogy, but a carbon budget is a diet plan. The idea is that you restrict the amount of carbon we consume over a period of time. Limiting the amount of carbon we can emit is a really good idea because continuing to pump carbon into the atmosphere is a little like having someone pile lots of blankets on you when you are already too hot (see our Climate Science section). The planet is going to get hotter and we cannot simply kick these extra layers of carbon off. The effects of this are already being felt – the planet has already warmed by 1 degree against pre-industrial levels.

Ideally, we need to limit the amount of carbon we can use by as much as possible as soon as we can. The trouble is, carbon emissions underpin pretty much everything we do. So scientists have said that if we really must keep emitting carbon it would be best to limit warming to somewhere around 1.5 degrees (against pre-industrial levels) to avoid the worst effects and definitely not more than 2 degrees. As such, there is a limited amount of carbon we can pump into the atmosphere whilst staying within this safer (but still not safe) level of warming. But with a finite amount of carbon who gets to emit what?

Manchester has adopted a carbon budget of 15 MtCO₂ (‘million tonnes of carbon dioxide’), which is the amount of carbon that it's allowed to emit from our homes, workplaces and ground transport between 2018 and 2100. This is also the amount that the Tyndall Centre thinks is Manchester’s fair share to stay within 2 degrees of warming without gambling on yet-unrealised technologies to suck carbon out of the atmosphere. The city was planning to reduce its emissions by 13% each year to meet this. But just over 1/4 of this budget has been used in the first two years, requiring a 14.8% reduction in subsequent years to stay on target. We need to do much, much better else we will have used all of the budget in the next few years.

The city’s relationship with aviation is also under a limited carbon budget - but this is for UK-wide aviation. Tyndall Centre researchers have proposed an allocation of 1,262 MtCO₂ for all UK aviation CO₂ emissions and the city’s airport and citizens have a key role to play in this too. Analysis in the latest Manchester Climate Change Annual Report (2020) indicates that emissions from citizens flights from all airports and flights from Manchester airport are all still on a gentle upward trajectory - though lockdown will have subsequently impacted this.”

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INTERVIEW WITH DR JOE BLAKEY (CONTINUED)

What are the dangers in talking about carbon budgets- what do they hide or omit?

We tend to not think about non-direct emissions (ie. the role that territories play in emissions that happen beyond their bounds) - we tend to focus on emissions happening directly in the city or those from electricity consumption. As such, the city does currently have a budget for emissions occurring from investment (e.g. having a factory abroad manufacture carbon-intensive goods, or investing in oil) and consumption (e.g. buying a laptop produced overseas). We can paint a fuzzy picture of what these emissions look like, but it's hard to track the city's impact on these specifically as you would need to monitor progress against a budget. But we still need to act on them, they're another level we can pull to steady the wheels of the already-unfolding climate emergency.

Budgets may also contain commitments to carbon offsetting, which might involve getting other places to limit their emissions so you can have a bit of overhead in your budget or might relate to sucking carbon out of the atmosphere (planting trees is an obvious example, but there's also big engineering attempts to do this mechanically and to bury the carbon underground). There's huge issues with this - both in terms of who has a 'right' to emit and the level of confidence we have in these offsetting approaches (which is pretty low). Trees can be cut down, people can break promises and negative emissions technologies are unproven at scale.

Finally, I think the idea that many historically prosperous nations can have any sort of carbon budget is a troublesome one. We've already had more than our fair share of carbon. There's no way we can reconcile any carbon budget with what you might call 'historical emissions debt'. We're taking an increasingly large share of the pie, so we have a moral obligation to take as little as possible."

What are some key steps the University can take to increase climate awareness in the core curriculum across different courses, in order to prepare students for the climate challenges we will face in the coming years?

"As most students are those that inherit the consequences of climate change, it strikes me that students should have the biggest say in how we tackle it. So I think the University should focus on amplifying the voices of students alongside their innovative ideas. We should not simply be explaining to students on the solutions - we instead need new thinking. Sure we can lay the foundations but it's vital we can create spaces where their new, innovative ideas can emerge.

To this end, I also think we need critical perspectives more than ever - tinkering around the edges will not resolve the issue - we do need radical, big ideas that challenge the dangerous rails on which society runs. These critical disciplines seem more vital than ever. Geography is a good example (but as a Geographer I'm biased!). I also think we have a responsibility to a) share the voices of those who are unevenly affected by climate change but often don't have a voice on the matter and b) be honest about how we got into this mess and how deep we are in it. Perhaps then we can start thinking about the scale of change needed and what this requires."