Autumn 2014
Newsletter

Environment Centre | Lancaster University

What's Happening in...
Geography

Painting the sky to save the planet?

The chances of avoiding dramatic climate change look slimmer and slimmer. International climate policy making events happen regularly, but disappointment about what is agreed at them is equally regular. We are already living with the impacts of climate change, and very likely more dramatic impacts on weather patterns, agriculture, coastal settlements etc. will be felt globally in your and my lifetime. And the impacts may be more than we can deal with through reinforced flood barriers and such relatively easy ways of adapting to the impacts of climate change. So what do we do in this gloomy situation?

One potential answer is to re-design the climate system. It is maybe possible that we could quite quickly for example change the colour of the clouds so that they reflect a bit more light back out into space and in this way cool the planet enough to balance out global warming. We would in effect re-design the climate system to counteract global warming. This idea and others like it are together called climate engineering, and there is more and more research done to develop them. But there is also more and more debate, since this kind of action comes with its own problems and risks. For example, it is very difficult to predict the effects changed cloud colour would have on a complex system like the atmosphere.

Would you support the re-design of the climate system to save the planet from global warming? At Lancaster Environment Centre, you can work with social scientists and fellow students to explore these complex decisions. We look into scenarios that take into account the potential effects on people across the planet, future generations, other species... We think about what we need to know to make good decisions, but also how best to think about the uncertainties involved in predicting the impacts of doing climate engineering.

This is one example of how social scientists at Lancaster University engage with climate change and technology that you might encounter studying human geography here. Another example involves fracking (hydraulic fracturing), which has been claimed to be both a contributor to global warming and an option for reducing our greenhouse gas emissions and mitigating against climate change. One of our second year modules features group projects on fracking, where students produce position statement for as well as against fracking, as a way of exploring the controversy around this technology.

The Earth reflecting sunlight back out: Image courtesy of NASA.

Changing the colour of the clouds brings new problems: Cover of the report Geopiracy, The Case Against Geoengineering, by ETC Group.

Hydraulic fracturing engineer: Image © Państwowy Instytut Geologiczny.

For more details about the reports above or about Geography courses on offer at Lancaster University please contact the Geography Admissions Staff,

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