

theguardian

The clique that is trying to frame the global geoengineering debate

Suspicious of the UN, resistant to regulation and leading inquiries – how has this group become the 'go-to scientists'?

Clive Hamilton
guardian.co.uk, Monday 5 December 2011 11:21 EST



'Geoengineering is here to stay and the pressure to deploy schemes to regulate the planet as a whole will become extreme'. Photograph: Gallo Images/Getty Images

The contradictory and ambivalent recommendations of [the report of the Solar Radiation Management Governance Initiative \(SRMGI\)](#), published last week, reflect the emerging faultlines in the global debate over [geoengineering](#).

The global debate has been heavily dominated by a very small group of North American scientists actively engaged in [geoengineering](#) research. They are present in almost all of the expert deliberations, including SRMGI. They have been the leading advisers to parliamentary and congressional inquiries and their views will, in all likelihood, dominate the deliberations of the UN's Intergovernmental Panel on [Climate Change](#) (IPCC) as it grapples for the first time with the scientific and ethical tangle that is climate engineering. In sum, they have made themselves the "go to guys" on climate engineering.

The scientists in this group– dubbed the "[geo-clique](#)" by author [Eli Kintisch](#) – also allocate much of the funds to geoengineering research via a private trust, bring together young researchers from around the world to swap ideas under their auspices, and own patents and investments in geoengineering technologies. The latter is either a case of putting your money where your mouth is or a blatant conflict of interest.

Most importantly, they bring a distinctively American world view to geoengineering. They have the kind of faith in humanity's ability to overcome threats and master the environment that defined the science-as-saviour culture of the United States in the post-war decades. While they are worried about the damage being done to the environment, they cannot see any intrinsic reason why, if we have the means, we would not take control of the planet as a whole.

The geo-clique are lobbying for a huge injection of public funds into geoengineering research, justified on the grounds that "the world" (read America in the era of the Tea Party) will never countenance the carbon abatement policies we so badly need.

They are suspicious of "the UN" and resist moves to regulate research and testing of geoengineering, insisting that "professional norms" are adequate, which is why, incredibly, the SRMGI could not collectively call for a moratorium on deployment. After the "recklessness" of the decision by the UN Convention on Biological Diversity to move against ocean fertilisation experiments, one argued, we shouldn't "encourage international bodies to go around declaring moratoria".

Aware that very few members of the public have yet formed an opinion on geoengineering, or have even heard of it, the geo-clique is working at framing geoengineering positively. So they have attempted to make the acronym SRM stand not for "solar radiation management" but for "sunlight reflection methods" to avoid the sinister-sounding "radiation".

In this effort they have been joined by the Bipartisan Policy Center, a conservative Washington non-profit, whose report last month rebranded geoengineering "climate remediation" so as to make sulphate aerosol injections into the stratosphere sound healthful. The geo-clique dominated that inquiry too.

Now that the Beltway is getting involved, the pressure is on for the United States to take control of the geoengineering agenda. While the subject was regarded as taboo only five years ago, the normalisation of geoengineering as a legitimate response to global warming is now proceeding rapidly. The next IPCC report will take a giant stride in that direction.

So everything is going to plan. Except that, on the fringes, counter views are starting to be heard. Even among scientists, I have noticed a marked difference in attitude to geoengineering in America and Europe. The Promethean dreams of the geo-clique – perhaps expressed most starkly by its sometime mentor, Pentagon "weaponeer" Lowell Wood, when he declared: "We've engineered every other environment we live in, why not the planet?" – are harder to defend in Europe.

In Europe, and especially Germany, geoengineering is treated with much more circumspection and nervousness. In short, the complexity and capriciousness of the Earth are accorded a much greater respect, and there is a historical reservoir of mistrust for the good intentions of humans intoxicated with technological power.

Let's hope their nervousness does not keep them out of the debate. For as the world flounders in the mire of climate politics, one thing is certain: geoengineering is here to stay and the pressure to deploy schemes to regulate the planet as a whole will become extreme. Anyone with a modicum of foresight can see that the geopolitical stakes are immense.

• Clive Hamilton is professor of public ethics at Charles Sturt University in Canberra and the author of Requiem for a Species. He is a member of SRMGI.

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Mongoose86

5 December 2011 4:33PM

Why do I get the distinct feeling these so-called geo-engineers would balls-up the planet and end us up with a new ice-age?

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fnusnuank

5 December 2011 5:04PM

Sounds just like what's happened in climate 'science'.

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mcmikerg

5 December 2011 5:09PM

Response to [fnusnuank, 5 December 2011 5:04PM](#)

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JezJez

5 December 2011 5:13PM

Is this an attempt on a new take on the anti American discourse that is just so par for the course in this publication? Geo engineering has to be the most sinister part of the "remedies" envisaged to "solve" climate change. If scientists can't get their heads around the possible consequences of the introduction of the cane toad in Australia how can anybody reckon they know what they are up to concerning geo engineering?

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EmmaChisset

5 December 2011 5:21PM

Thanks for an interesting and informative article.

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GRLCowan

5 December 2011 5:24PM

European Dr. R.D. Schuiling is pursuing an exact solution to excess CO2 in the atmosphere: take it out. Also known as "enhanced weathering". Biochar is another means to the same end, but I think it is less effective.

"Solar radiation management" or "sunlight reflection methods" are inexact solutions, or as I like to say, SACTCAR solutions -- Swallow A Cat To Catch A Rat -- and if the concern expressed by Clive Hamilton and some commenters is genuine, they should not ignore the BTRO solution.

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fr33cyclr

5 December 2011 5:28PM

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What worries me is it will just turn into an excuse to do nothing - we can carry on as we are because this will solve the problem, except the cost and potential problems will make it take longer and longer before we actually do.

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oldbrew

5 December 2011 5:33PM

Response to [JezJez](#), 5 December 2011 5:13PM

how can anybody reckon they know what they are up to concerning geo engineering?

They don't, that's probably why...

The geo-clique are lobbying for a huge injection of public funds into geoengineering research

Whether they should be allowed to hold patents paid for out of public funds is another matter.

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FearlessEcoWarrior

5 December 2011 5:34PM

I'd wonder why they don't just focus a "big science" approach down the solar power satellite approach - surely that would be more appropriate to reduce carbon emissions and generate energy?

Wouldn't it be just as expensive and complex to put a damn big mirror up there as it would to put solar panels in orbit?

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BunnyFlumplekins

5 December 2011 5:43PM

This article does have a very unpleasant anti-American tone to it.

Most importantly, they bring a distinctively American world view to geoengineering. They have the kind of faith in humanity's ability to overcome threats and master the environment that defined the science-as-saviour culture of the United States in the post-war decades. While they are worried about the damage being done to the environment, they cannot see any intrinsic reason why, if we have the means, we would not take control of the planet as a whole.

Well if it's possible, why not ?

I'm not saying it is, but the whole commentary comes across as a churlish, anti-technology swipe.

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BillyTaylor

5 December 2011 5:59PM

Geo engineering is the ONLY solution to climate change, anyone who thinks we are going to reduce emission in time to stop 2 degrees is not being realistic. My bet is we will surpass those in the next decade and then ramp them up even further by a

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considerable margin. If we want to avoid huge sea level rises then we best start as soon as possible with this.



johntherock

5 December 2011 6:07PM

I suppose relocating lower London would come under Geoengineering.....

Yours on higher ground - John

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BillyTaylor

5 December 2011 6:10PM

Wouldn't it be just as expensive and complex to put a damn big mirror up there as it would to put solar panels in orbit?

Not sure, but if you're the only country doing this it will do little for CO2. If you are the only country doing the geo engineering, that will, hopefully, help the planet.

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euangray

5 December 2011 6:20PM

Response to [BunnyFlumplekins](#), 5 December 2011 5:43PM

This article does have a very unpleasant anti-American tone to it.

Well, this is the Guardian, after all.

EG

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hombreverde

5 December 2011 6:41PM

Frightening stuff.

Sometimes I wonder if geoengineering should be promoted, if only to illustrate this is what the world gets if humanity doesn't kick that nasty fossil fuel habit.

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Jacksavage

5 December 2011 6:46PM

The Promethean dreams of the geo-clique....

Oh dear...what happened to Prometheus again?

We have spent billions in a futile attempt to limit CO2 to avoid catastrophic man made global warming (be it real or imaginary) and now we are going to throw a few trillion after it...

Can someone not spare a few shillings for a climate change scientist who is down on his funding?

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TBombadil

5 December 2011 7:04PM

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So after earning trillions of dollars wrecking the Earth's climate they hope to earn trillions more putting it back together again.

The irony of the situation is that these are same people who have been telling us that nothing we puny humans do could possibly affect the climate and it would be sheer hubris to claim that reducing our output of CO2 would prevent global warming. They now tell us they propose managing the climate for the benefit of USA.

To me cutting CO2 output looks a better and a cheaper option in the long term and will happen anyway as the fossil fuels run out.

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Atomant77

5 December 2011 7:34PM

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Response to [fr33cyclcr](#), 5 December 2011 5:28PM

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What worries me is it will just turn into an excuse to do nothing - we can carry on as we are because this will solve the problem, except the cost and potential problems will make it take longer and longer before we actually do.

I see a parallel with the current economic situation... kick the can.

Thing is, change is already happening and will not get back to 'normal' in our lifetime. The pumping of GHG's has no signs to stop and the resulting warming is getting worse. So, we think we will cover Sunlight in an attempt to cool Earth... without considering how important LIGHT is for life on Earth? or without considering whether adding water (a GHG) won't trap more heat, or how this sudden cooling could affect weather patterns?, ... ok, maybe the good folks at the RS have considered it, but if they have I think some answers to those questions may be needed before a go ahead is decided. I would expect that to lower the temperature (or even to stabilize it), would require a certain amount of light dimming globally. Covering smaller areas would not be as efficient since high winds would carry the artificial clouds away. You could argue that jet condensation trails do some of that already yet the warming keeps creeping. I hope people realize that It would have to be a global cloud to achieve some sort of stability, and to be honest, that sounds very sinister indeed.



BriscoRant

5 December 2011 8:23PM

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Do the geo-interference proponents have any links to - the George C Marshall Institute? the American Enterprise Institute? The Homeland Institute?

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Ofthousands of US privately funded think tanks and institutes - , these 3 keep coming up re climate change. Oh - climate change includes e.g ozone depletion , acid rain, and 1980s work on global warming. And environmental pollutants such as tobacco smoke (aka passive smoking)

And are Mr Nierenberg, Mr S Fred Singer, Mr Steitz, and Mr Jastrow by any chance linked to this?

I predict, for Australia, the so-called Institute for Public Affairs will soon start writing on this fashionable area.



BriscoRant

5 December 2011 8:26PM

Two other names worth looking out for - also long linked to the tobacco industry research to make people believe cigarettes are OK. Hill and Knowlton.

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BriscoRant

5 December 2011 8:44PM

Finally, do geo-engineer promoters, *deserve* to be referred to as scientists?

Science favours objectivity - striving to be aware of your biases, knowing how much they affect you and your judgement. It's built into the way we work. We teach this to students. We have protocols to minimise bias. We avoid situations causing bias. Where we cant avoid them - we are transparent about declaring them.

One of the denialists techniques of political attack - was to ignore this aspect of science training, and it wont be long before someone gets on here to spout about scientists all being motivated more by career and promotion, than by professional integrity.

But you can always tell what faults denialists have themselves - by listening to what they're accusing others of - as noted by christian scripture, and more recently by psychologists.

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BriscoRant

5 December 2011 8:50PM

Someone complained that the above article had some anti American bias.

I shall refer to the US from now on as "Mongalistania". That should make clear to us, it is a foreign country, looking after its own interests and no one else's.

In an international realm where the rules are few and weak.

Some countries are good international citizens.

Others are bullies: in the sand pit they will wreck your sandcastle, just to get a few extra shells for their own.

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kvms

5 December 2011 8:52PM

Plant a pea.

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It will extract CO₂ and N from the atmosphere, using solar cells. [Share](#)

It uses sophisticated photosynthesis with chlorophyl and NO₂ extraction using bacteria in the root system.

Hey, someone pls beef this up with some more bullshit bingo and call it geoengineering.

It might even save us from the madness of CO₂ bombs planted under the ground.

There is a lake in Camerroom isnt there, which has CO₂ in pockets, They have burst a couple of times killing hundreds of people.

Think of a CO₂ cloud rolling down the Ruhr valley. It could kill millions.

Why do winemakers keep candles alight in their cellars? Because some have been killed by CO₂!



BriscoRant

5 December 2011 9:01PM

So some Mongalistanians are proposing - from the National Institute of Research - they have discovered the secret solution to global warming. They know just how to cure it. They *can* cure it.

I have to say, their cure's untested and unproven - but anyway, they say they tried it out, they know it works, no side effects, risk free, totally natural.

They assure us 100% money-back guarantee if it doesnt.

....

Would you risk buying a used car from these foreigners?

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Teratornis

5 December 2011 9:15PM

The article neglects to mention the knock-down argument against all proposed solar radiation management schemes - they do nothing to address ocean acidification, the other consequence of man's additions to carbon dioxide levels in the atmosphere. Ocean acidification threatens to cause mayhem sooner than warming will, and by itself could justify an even lower and thus more difficult climate change target than follows from the official UN target figure of 2 degrees C allowable warming.

The only class of geoengineering techniques worth discussing is carbon dioxide removal, which are necessary anyway if the nominal 450 ppm carbon dioxide concentration target turns out to be dangerously high and we need to return the atmosphere to the composition it had a few years ago.

Carbon dioxide removal is the only form of geoengineering that addresses the root cause of climate change. But naturally it costs more and works more slowly than the quick fix (to warming only) of solar radiation management. It is also unlikely that any carbon dioxide removal scheme could hope to keep up with

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Man's present emissions, so CRM only makes sense in conjunction with sharply reducing or eliminating our emissions.

In any case, I wouldn't be so negative on the "North American" proponents of SRM. Their position is a massive step up from climate change denial which seems to be the official position of the Republican Party now. Most Tea Partiers would probably ask why we need to geoengineer our way out of a hoax. At least the SRM proponents believe science.

In any case, to anyone worried about the eventual temptation for someone to resort to SRM, look at any busy highway or airport and consider the possibility that humans will ever agree to do what is necessary to make SRM unnecessary. I haven't yet found a way to talk the people I know who believe in climate science out of flying, let alone the vast bulk of people who seem indifferent at best to the problem of climate change. Flying is just one of many sectors in need of vast changes that many people will not welcome.



Teratornis

5 December 2011 9:39PM

Response to [BriscoRant, 5 December 2011 8:50PM](#)

I shall refer to the US from now on as "Mongalistania". That should make clear to us, it is a foreign country, looking after its own interests and no one else's.

I must have missed the news from Durban - did all the other countries of the world sign a binding agreement to cut their greenhouse gas emissions by the amount climate scientists recommend?

The US is undoubtedly among the chief of fossil fuel sinners but the only other countries who are really doing much better are those who are limited by poverty - which some of them are fast lifting themselves out of by ramping up their fossil fuel emissions.

Also, please don't tar the whole US for the efforts of the Tea Party minority. Be as specific as possible when placing blame.

Some countries are good international citizens.

Example please? Which country that can pay the asking price for fossil fuels is burning appreciably less than they can afford?

We can look at a country like France, which has lower per capita emissions than the US. All those nuclear plants and electric trains. And yet so many French citizens insist on driving personal automobiles to Spain on holiday that France - itself the world's most visited country - recently built [the tallest bridge in the world](#) to facilitate more driving. We also don't see France shutting down its airports to prevent all those aviation-related emissions, because that would harm the French tourism industry, the world's most lucrative.

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Aviation might only account for 2% of global greenhouse gas emissions, but it has doubled roughly every 12 years since the 1970s. If that growth rate should continue, aviation by itself could wreck the climate eventually. Especially as conventional oil runs out and industry turns to increasingly carbon-emitting sources such as tar sands. Fueling a flight with kerosene from tar sands roughly triples the overall emissions.

Others are bullies: in the sand pit they will wreck your sandcastle, just to get a few extra shells for their own.

That's essentially true of everyone who burns fossil fuels directly or indirectly. The US happens to have been the most glaring example, only recently surpassed by China in terms of gross emissions.

What we need is for some developed country to show it is serious about climate change, by shutting down its airline industry until a genuinely carbon neutral aviation fuel is available at scale. That would be a solid first step.



conanthebarbarian
5 December 2011 9:54PM

I've seen this film before. Send for MacLeod.

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Teratornis
5 December 2011 10:22PM

Response to [kvms. 5 December 2011 8:52PM](#)

Plant a pea.

It will extract CO₂ and N from the atmosphere, using solar cells.

It uses sophisticated photosynthesis with chlorophyll and NO₂ extraction using bacteria in the root system.

Hey, someone pls beef this up with some more bullshit bingo and call it geoengineering.

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Actually green plants are the carbon capture devices in several carbon dioxide removal schemes. The main trick is to stop the carbon from going back into the atmosphere when the plant dies and its biomass decays or burns. One possibility is [biochar](#), which has other potential benefits such as soil remediation. The world's most fertile soils contain a lot of pyrogenic carbon, for example laid down by brush fires that repeatedly swept the prairies.

Green plants would be hard pressed to keep up with Man's fossil fuel emissions, however. For example, the Modern Marvels television program about Carbon mentioned the factoid that if you planted 300,000 trees and let them grow to maturity, they would capture the amount of carbon emitted by a 500 MW coal fired power plant in one week. Rough check: 500 MW * 0.8 capacity factor * 24 hours * 7 days * 1 kg CO₂/kWh * 1000

kW/MW = ~~67 200 000~~ kg CO₂ or 224 kg per tree. I'd think trees could do a bit better than that but it does give some idea of the scale of the problem.

It might even save us from the madness of CO₂ bombs planted under the ground.

There is a lake in Cameroon isn't there, which has CO₂ in pockets, They have burst a couple of times killing hundreds of people.

That sounds like Lake Nyos, one of the world's three known exploding lakes according to Wikipedia.

Humans already inject carbon dioxide into the ground - it's a standard enhanced recovery technique in oil extraction. I haven't heard of mass deaths resulting from this practice.

There's no point in injecting carbon dioxide into the ground as a carbon sequestration technique unless you are pretty sure the carbon dioxide is going to stay down there. There is, of course, already a lot of carbon dioxide trapped underground, along with natural gas and even helium. There are lots of rock formations capable of trapping gases in large quantities for millions of years.

Some rocks react chemically with carbon dioxide to form various carbonate minerals which are more stable. This is part of the so-called "rock weathering thermostat" which should eventually restore the Earth's climate stability a million or so years after humans finish their carbon pulse.

Think of a CO₂ cloud rolling down the Ruhr valley. It could kill millions.

Under what scenario could a deep injection site release so much carbon dioxide at once? Exploding lakes can do it because they gradually accumulate carbonic acid from carbon dioxide emitting magma reservoirs near the lake bottoms. The waters can then overturn suddenly in a limnic eruption, releasing the accumulated carbon dioxide in one brief event.

Lake Nyos itself can be remediated by installing vent tubes, which remove the carbon dioxide gradually thus preventing the buildup that leads to catastrophic release.

I'm thinking of the billions who look sure to be killed if we keep dumping our carbon dioxide emissions into the atmosphere.

We already have highways, airplanes, power plants, etc. spewing millions of tonnes of carbon dioxide into the atmosphere without causing acute carbon dioxide asphyxiation. To get that much carbon dioxide pouring out of a man-made underground reservoir quickly enough to wipe out, say, the Ruhr Valley might be difficult to arrange even if someone was trying to do it. If you had a pipe blasting out carbon dioxide from the ground as fast as, say, a coal-fired power plant does (millions of kg per week), you could put a stack on it to inject the carbon dioxide into the air a few hundred feet above the ground. People can live right under those stacks without suffocating instantly.

The risk from a carbon dioxide reservoir underground is similar to the risk from a natural gas reservoir. If all that natural gas

bursts out of a deposit quickly, it would asphyxiate anyone on the surface by displacing oxygen. Or the edges could ignite in a massive fuel-air explosion, which makes natural gas even more dangerous than carbon dioxide.

Humans do cause some natural gas explosions from piping leaks, but natural natural gas explosions seem to be fairly rare. If such releases were common there wouldn't be any natural gas still sitting there for humans to find and extract.



portergate

5 December 2011 10:49PM

These geo-engineers sound very dangerous to me.

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LochnessMunster

5 December 2011 11:05PM

fususnuank

5 December 2011 5:04PM

Sou

nds just like what's happened in climate 'science'.

Why the quotation marks on the word science?

Do you even know?

Pathetic.

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LochnessMunster

5 December 2011 11:18PM

BunnyFlumplekins

I'm not saying it is, but the whole commentary comes across as a churlish, anti-technology swipe.

Heh heh. Love it. And this from the same group of Luddites claiming that 'solar doesn't work at night' and 'wind-power is useless' and 'we can't store the energy' etc etc.

Perhaps it's a legacy of that other disastrous 'technological miracle' we were promised - nuclear power.

Clean, safe, endless, and "too cheap to metre".

I'd rather just switch to clean, sustainable energy sources. Lord knows there's a thousand times more of it than we can ever use. All we need is for people to stop their churlish anti-technology swipes against it and just do it.

Compared to the idea of pumping millions of tons of sulphates into the atmosphere - and let's face it, once we start we can **never** stop come wars, recessions whatever - it just seems like simple common sense to me.

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BunnyFlumplekins

5 December 2011 11:39PM

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Response to [LochnessMunster, 5 December 2011 11:18PM](#)

Evening LM - long time, no argue.

I know you may find this hard to believe, but I am actually pro-solar power as a technology. It's the badly handled UK FITs scheme which winds the hell out of me, along with what I personally consider to be crazy ideas like DESERTEC.

I'm not quite so keen on wind power, but would have no particularly objection to say 10% of the UK's electricity from it. Again I have serious reservations against specifics, but only tend to get too wound up about siting issues and what I personally consider to be hopelessly optimistic and incredibly expensive high wind power scenarios.

I'm not saying I'm a fan of any particular geoengineering technology. A couple of the ideas I've seen look rubbish. What concerns me however is the tone of so many, who seem to dismiss it out of hand and in the case of this article, seem to be unreasonably prejudiced against an entire country.

Enough for now - got to get up early tomorrow. That shilling and trolling won't do itself. ;-)

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Liam23

6 December 2011 7:00AM

One thing i dont understand. If geo-engineering were actually feasible, it would undoubtedly be a large, expensive project. Who is going to pay for it? And why would they pay for it? If all the countries are going to chip in, what's to stop a country from just deciding not to pony up, safe in the knowledge that they can still reap the benefits from the geo-engineering paid for by the others?

It's the tragedy of the commons again.

And if all the countries did agree to pay for it, where would they get the money? Increased taxes, most likely.

Carbon tax or geo-tax, pick your poison.

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Monkeybiz

6 December 2011 8:47AM

But redirecting solar radiation wont do anything to help with oceanic acidification. Jesus wept!

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Monkeybiz

6 December 2011 8:51AM

Liam23

One thing i dont understand. If geo-engineering were actually feasible, it would undoubtedly be a large, expensive project. Who is going to pay for it? And why would they pay for it?

Try corporations like EDF, Seimens, BP, Shell, Exxon-Mobil, GE and Boeing, which would do it once they could work out how to

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make an ongoing income stream from the process. Probably in the form of a 20% income tax for "climate management services" (though with a sliding scale of discounts for the wealthy 10%, 1% and 0.01% no doubt).

What a wheeze!



SirChevalier

6 December 2011 10:48AM

Cutting GHG emissions and moving to renewable energy sources will be much much cheaper and far less risky than geo-engineering. It will also have a high probability of success - as long as governments don't dick around for much longer.

I just wish all these cold-war Dr Strangeloves would retire gracefully and take up gardening.

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BillyTaylor

6 December 2011 11:08AM

Re ocean acidification. Can't they just drop a few million tonnes of limestone to try and neutralise the carbonic acid?

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Pitthewelder

6 December 2011 12:34PM

Billy Taylor - apparently the union of concerned pharmacologists have previously suggested giving the planet a large packet of antacid pills to suck on but the problem was that they could not find the budget for the prescription.

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JamesFranklin8

6 December 2011 3:41PM

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BillyTaylor

6 December 2011 5:58PM

Billy Taylor - apparently the union of concerned pharmacologists have previously suggested giving the planet a large packet of antacid pills to suck on but the problem was that they could not find the budget for the prescription.

Well unless they find the budget somewhere the bottom of the oceanic food chain will collapse.

Its called "The Guardian" because they think their job is to Guard the world from the evils of america.

If thats the case they aren't doing a very good job of it are they?

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BillyTaylor

6 December 2011 6:00PM

Cutting GHG emissions and moving to renewable energy sources will be much much cheaper and far less risky than geo-engineering. It will also have a high probability of success - as long as governments don't dick around for much longer.

That's the sticking point though, they can't get their collective arses to agree anything. As such geo engineering looks the most likely option of saving ourselves from ourselves.

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NeverMindTheBollocks

6 December 2011 7:38PM

It's great to see a story about scientists like these actively seeking out solutions to these environmental issues.

Along with our ongoing transition away from fossil fuels, such ideas could very well be just what we, and our planet, need.

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error418

7 December 2011 2:52AM

Most Greens here have called the skeptics view of a small CAGW cabal hijacking the UN and climate science as a conspiracy theory. Above we read from a Green author about a conspiracy in geo engineering. The only difference is the former was a mixed Anglo American endeavor while the latter is purely American: the hate for Uncle Sam's deviations is hard to suppress I guess.

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HilarySutcliffe

7 December 2011 11:22AM

It is astonishing. Are we ever going to learn from the mistakes of the past? A global governance framework is essential, with multiple inputs - yet again the Brits and the Yanks think they know best. It's depressing.

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FullMentalJacket

8 December 2011 10:41AM

No mention of replanting all the trees that have been cut down from woodland, forest and rainforest to sink carbon into. Not much profit in that...

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