

Carbon cuts 'only give 50/50 chance of saving planet'

As states negotiate Kyoto's successor, simulations show catastrophe just years away

By Michael McCarthy, Environment Editor

Monday, 9 March 2009

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The world's best efforts at combating climate change are likely to offer no more than a 50-50 chance of keeping temperature rises below the threshold of disaster, according to research from the UK Met Office.

The key aim of holding the expected increase to 2C, beyond which damage to the natural world and to human society is likely to be catastrophic, is far from assured, the research suggests, even if all countries engage forthwith in a radical and enormous crash programme to slash greenhouse gas emissions – something which itself is by no means guaranteed.

The chilling forecast from the supercomputer climate model of the Met Office's Hadley Centre for Climate Prediction and Research will provide a sobering wake-up call for governments around the world, who will begin formally negotiating three weeks today the new international treaty on tackling global warming, which is due to be signed in Copenhagen in December.

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The treaty, which is due to replace the 1997 Kyoto Protocol, is widely seen as the Last Chance Saloon for the community of nations to take effective action against the greatest threat the world has ever faced. But the Met Office's new prediction hits directly at the principle guiding all those hoping for an effective agreement, with the European Union in the lead: that of stopping the warming at two degrees Centigrade above the "pre-industrial" level (the level of average world temperature pertaining two hundred years ago).

Today, world average temperatures stand at about 0.75C above the pre-industrial, and many scientists and politicians agree that further increases have to be stopped at 2C if catastrophic impacts from the warming are to be avoided, ranging from widespread agricultural failure and worldwide sea level rise, to countless species extinctions and irreversible melting of the



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world's great ice sheets.

But the Hadley Centre's simulation indicates that even if global emissions of carbon dioxide, the main greenhouse gas causing the warming, were to be slashed at a very high rate the chances of holding the rise at the C threshold are no better than even. The scenario, prepared for Britain's Climate Change Committee, the body recommending the UK's future carbon "budgets", visualises world CO2 emissions peaking in 2015, and then falling at a top rate of 3 per cent a year, to reach emissions of 50 per cent below 1990 levels by 2050.

At the moment, global emissions are thought to be rising at nearly 3 per cent a year – so turning that into a 3 per cent annual cut would be a gigantic slashing of what the earth's factories and motor vehicles are pumping into the atmosphere. There is as yet nothing remotely like that on the table for potential agreement in Copenhagen, and if a deal of this ambition were to be done, it would be regarded as a triumph.

Yet even with that, the Hadley Centre research suggests, the chances of keeping the rise down to about 2C by 2100 would be only 50-50. Furthermore, the simulations suggest that there is a worst-case scenario – about a 10 per cent chance – of the rise by the end of the current century reaching, even with these drastic cuts, a level of 2.8C above the pre-industrial, which is well into disaster territory.

With any action that is slower than the scenario above, the likeliest outcome is a much higher eventual temperature – and in fact, the model indicates that each 10 years of delay in halting the rise in global emissions adds another 0.5C to the likeliest end-of-the-century figure. So if emissions do not peak and start to decline until 2025, we can expect a 2.6C rise by 2100, and if the decline only begins in 2035, the figure is likely to be 3.1C – even with 3 per cent annual cuts.

These new figures suggest quite unambiguously that the world is on course for calamity unless rapid action can be taken which is far more drastic than any politicians are so far contemplating – never mind the general public.

If action is sluggish or non-existent, the model suggests that climate change is likely to cause almost unthinkable damage to the world; under a "business-as-usual" scenario, with no action taken at all and emissions increasing by more than 100 per cent by 2050, the end-of-the-century rise in global average temperatures is likely to be 5.5C, with a worst-case outcome of 7.1C – which would make much of life on earth impossible. "Even with drastic cuts in emissions in the next 10 years, our results project that there will only be a 50 per cent chance of keeping global temperatures rises below 2C," said Dr Vicky Pope, the Met Office's Head of Climate Change Advice.

"This idealised emissions scenario is based on emissions peaking in 2015 and changing from an increase of 2-3 per cent per year to a decrease of 3 per cent per year. For every 10 years we delay this action another 0.5C will be added to the most likely temperature rise. If the world fails to make the required reductions, it will be faced with adapting not just to a 2C rise in temperature but to 4C or more by the end of the century."

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Carbon Cuts

 [margaret222](#) wrote:

Monday, 9 March 2009 at 01:57 am (UTC)

This article would be hilarious if it wasn't so sad. The models used cannot simulate the current weather properly, yet alone 100 years in the future.

Why is the planet's temperature about the same as 29 years ago, when satellite measurements began?

Meanwhile, the sun, the real source of planetary heat, shows no sign of breaking out of its current lethargy. Last time it behaved like this, serious cooling was observed. Of course, those wonderful computer models leave out any solar effects.

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Re: Carbon Cuts

 [perthpom](#) wrote:

Monday, 9 March 2009 at 04:02 am (UTC)

I have a graph of the warmest years on record from the UK Met office. There is an unambiguous increase in global temps over the last 20 years. The 2000's have all been in the top 10. 1980 (29 years ago) was 0.4C cooler than 2007. Although that sounds a little, it's about 20% of the way to the 2C beyond which things get nasty.

The solar argument is utterly derisible. So, as you say, the Sun should be cooling the Earth, yet OBSERVED warming is happening on the planet? So if you are correct, when the Sun gets going it will pump up temps even higher. And as we know, temp/CO2 are VERY closely linked (sometimes temps before CO2, sometimes vice versa - either way it changes climate).

Indeed we should be seeing higher temps with the concentrations of CO2 in the atmosphere (and the rate of change which is important too). If this is down to 'global dimming' as some believe, I look forward to the instant jump in temps when China's economy falls over - whether it be through the economic problem now or the lack of cheap fuel in about 2 years' time. Horrid scenario, but possible!

By the way - weather and climate are two very different things.

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Re: Carbon Cuts

 [forwardplanning](#) wrote:

Monday, 9 March 2009 at 06:25 am (UTC)

So if the Climate Change argument is not just a word change variation of the now discredited 'Global Warming' theory and that the climate is warming, how come we can't grow grapes in the North West anymore, the Romans could in the Chester area and what about the first Elizabethan era?

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Re: Carbon Cuts

 [canadastan](#) wrote:

Monday, 9 March 2009 at 09:17 am (UTC)

O come on now. Everybody knows the Sun has no effect on the Earth's temperature. If it did it would be warmer in the day time than at night.

Oh wait.....

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Re: Carbon Cuts

 [thomas_66](#) wrote:



Monday, 9 March 2009 at 09:27 am (UTC)

Exactly. And everybody would also know that, due to its elliptical orbit, the earth is significantly closer to the sun during our winter than it is during our summer. Oh wait.....

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Re: Carbon Cuts

[justagreenie](#) wrote:

Monday, 9 March 2009 at 04:06 am (UTC)

I have long ago (http://www.blognow.com.au/mrpickwick/Climate_change/) reached the conclusion that responses like "Carbon Cuts" are actually generated by a computer in the Heartland Institute, adding random identities such as margaret222 in the way that spam generators add identities to emails for Russian brides or sales of viagra.

The key to spotting them is the repetition of nonsense like "models used cannot simulate the current weather properly, yet alone 100 years in the future", and reference to the sun. Having a computer produce such denialist spam would be hilarious if it wasn't so sad. Unfortunately we share the same doomed planet with these fools, and they are taking us down with them.

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Which oil company do you work for?

[cronyblatcher](#) wrote:

Monday, 9 March 2009 at 05:46 am (UTC)

The poor ol' planet is going to toast all of us as a malignant virus with boots on, unless saved, not by treaties among those at the trough, but be people like Boadica Deen the formidable.

http://www.google.co.uk/search?rlz=1C1GGLS_en-GBGB300GB303&aq=f&sourceid=chrome&ie=UTF-8&q=boadicia+deen

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Re: Which oil company do you work for?

[forwardplanning](#) wrote:

Monday, 9 March 2009 at 06:27 am (UTC)

Agreed

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Re: Carbon Cuts

[thomas_66](#) wrote:

Monday, 9 March 2009 at 09:16 am (UTC)

This reply would be hilarious if it was'nt so sad. After all the information that has been made available, people don't even understand the difference between weather and climate.

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surge in temperatures likely

[someofusknow](#) wrote:

Monday, 9 March 2009 at 04:42 am (UTC)



Clearly the irrational desire of ordinary citizens to continue to drive cars and take overseas holidays, coupled with governments' and bankers insistence on economic growth at any cost are on a collision course with several realities.

It will be interesting to follow oil prices over the next few months, now that peak oil is well past and fiat currencies are under such severe pressure: a rapid rise in energy prices would achieve far more, far faster, than any any theoretical carbon cut treaties or protocols.

The big question though is global dimming (which seems to be holding back global warming for the moment). The anticipated reduction in aircraft movements and reduction in industrial output could well result in a reduction in global dimming and a massive surge in temperatures in a very short time frame (a few months), especially in the Arctic, where temperatures are already significantly higher than the long term average.

PS (I don't know which planet the people who think the Earth is cooling live on, but it is clearly not the same one as the rest of us, and must either be the planet Denial or the planet Uninformed, or as another contributor commented, some mindless computer that is sponsored by oil and coal corporations to generate spam at every opportunity).

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First Things First

 [nainoa](#) wrote:

Monday, 9 March 2009 at 04:58 am (UTC)

While many international leaders work toward emission reduction strategies, carbon capture and storage notions, and even preparing for inevitable climate change, the real problem is not tomorrows CO2 but yesterdays CO2. We must turn our attention to the 1000+ gigatonne carbon bomb, two centuries of accumulating CO2, still mostly in the air as it takes centuries for airborne CO2 to equilibrate with the rest of the planet. Reports call the alarm of ocean acidification, adding acid flames to the raging fires of fossil CO2. What's missing is mention of the best, only, means to fight ocean acidification and CO2 in the air.

Just 500 gigatonnes of yesterdays CO2 has reached the oceans where Revelle's Rule tells us 80% of CO2 ends up. The first carbon bomb will be exploding in the ocean for more than a century even if we stop the emission of new CO2 today. No amount alternative energies, recycling, bicycling, or "clean coal" will tend to the first carbon bomb. Sure lets reduce the size of the second bomb but first things first. Here's how.

ONLY ocean replenishment and restoration can enlist, as allies, the most powerful force of nature - the ocean plants, the bloomin' plankton. But high and rising CO2 in the air is not only responsible for ocean acidification worse it has fed green plants on land making them greener, bushier, and living longer making them "good ground cover." Ground cover improvements have reduced the amount of dust blowing in the winds by 1/3 in just a few decades. For the oceans dust in the wind brings vital mineral micro-nutrients, that terrestrial Yin (dust) is just as important as rain, the Yang, blowing from sea to land nurturing plant life. Since earth and ocean satellites went aloft 30 years ago we've measured decimation of ocean plants, 10% are gone from the Southern Ocean, 17% from the N. Atlantic, 26% from the N. Pacific, and 50% from the tropical seas. Just yesterday, a few decades past, ocean pastures grew more verdant consuming 4-5 billion tonnes more CO2 each year than today.

Today, as stewards of our blue planet, we must replenish ocean micro-nutrients to restore the verdant ocean pastures. If we bring the ocean plankton blooms back to levels seen only 30 years ago those plants will annually convert billions of tonnes of CO2 into ocean life instead of acid ocean death. Those verdant restored ocean pastures will deliver 7 times the CO2 reductions called for by the Kyoto Protocol.

To begin, and we must without delay, the work requires only tens of millions of dollars, to succeed in a matter of a decade requires only a few billion dollars. In the bargain the restored oceans will feed everything from tiny krill to the great whales and everything and everybody in between - fish, seabirds, penguins, seals and us.

Replenish and restore the oceans without delay. Read more at www.planktos-science.com

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Carbon Cuts

 [margaret222](#) wrote:

Monday, 9 March 2009 at 04:59 am (UTC)

This computer program called margaret222 would like to point out that it snowed in London in October, November, December, January and February. Arctic Ice has pretty well reformed. It would also like to point out that the USA has still enjoying one of its coldest, snowiest winters ever.

Computer program would also like to point out that it lives in Melbourne, and is looking forward to winter to cool itself to a more reasonable operating temperature.

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Re: Carbon Cuts

[justagreenie](#) wrote:

Monday, 9 March 2009 at 06:46 am (UTC)

Computer programmed to look for reply, and then add some more computer generated random words about snowing and Arctic Ice. The thing is to apply Turing's test. Clearly no normal thinking human could respond like this, so, ipso facto, a computer.

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Re: Carbon Cuts

[someofusknow](#) wrote:

Monday, 9 March 2009 at 08:27 am (UTC)

'This computer program called margaret222 would like to point out that it snowed in London in October, November, December, January and February. Arctic Ice has pretty well reformed'

The whole point about climate change is the greater climate instability and greater extremes of weather. In particular warmer oceans generate more rain and more snow, so the attempt to negate global warming actually confirms it!

And sure, Arctic ice reforms every winter -but not to the historical norm. Hence the discussion about the Arctic being ice free by 2013. The previous comments about 'the computer' being uninformed have been very much vindicated.

If the computer lives in Melbourne then it must be aware that temperatures reached new record highs in 2009 and that Victoria is in the midst of unprecedented drought that will probably make most of Victoria uninhabitable by 2020.

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Re: Carbon Cuts

[sara_sense](#) wrote:

Monday, 9 March 2009 at 10:40 am (UTC)

Aside from that, it actually didn't snow in London in Oct-Feb!

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All that is to come.

[living_fossil](#) wrote:

Monday, 9 March 2009 at 06:26 am (UTC)

This is a process in play with tremendous momentum. It cannot be averted. We will go extinct as a species. I propose building a very large satellite as a warning to any who might venture here from other star systems. It can record our demise and the reasons for it occurring. If technology holds out until the end then the very last human can be interred there. Mankind deserves a gravestone.

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Oh dear!

[stuartc44](#) wrote:

Monday, 9 March 2009 at 06:44 am (UTC)

Not one person posting on here has a clue what will happen with the Earths temperature in the next 50 years.....

INDEPENDENT
MINDS

Member

Not even the scientists know.

Totally pointless converstaions..... I'm right, no I'm right, no I am!!!

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MINDS

Member

Computer modelling

 **robertmnbvc** wrote:

Monday, 9 March 2009 at 07:26 am (UTC)

Ahhh, more computer modelling. As successfully used by the global banking system over the last few years. Not. As successfully used by the Met Office on so many occasions, such as September 2008, when it predicted that the 08/09 winter would be "milder than average". How's that looking now chaps? And how's the ice-free Artic coming along? That was supposed to have happened by now, wasn't it?

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Member

Alarmist claptrap.

 **ptstroud** wrote:

Monday, 9 March 2009 at 08:19 am (UTC)

Another load of greenie alarmist claptrap. So the Hadley Centre's super computer has forecast this catastrophe using a climate model. Was it one of the Global Circulation Models that have forecast increasing temperatures with increasing carbon dioxide content? Well, perhaps Michael McCarthy has not bothered to read the results of global temperature measurements, including the Hadley Centre's own measurements, that show no warming whatsoever in the past decade in spite of a twenty five percent increase in carbon dioxide. In fact even the US NOAA a very warmist organisation has admitted this and have said that we may well be entering a twenty or thirty year cooling period.

The computer models rely on the assumption that the heating due to carbon dioxide precipitates positive feedback due to water vapour the most prevalent greenhouse gas. However, there is increasing evidence that the feedback is probably negative, or at least neutral. If this is so then there can be no catastrophic warming and cutting the emissions of this trace but life giving gas is a complete waste of time. This will be discussed in New York today and tomorrow when eight hundred climate scientists, economists and policy makers will attend the second International Conference on Climate Change. Funny though, the BBC has not publicised this important meeting, I wonder why?

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MINDS

Member

counter argument supports global warming!!!

 **someofusknow** wrote:

Monday, 9 March 2009 at 08:22 am (UTC)

'This computer program called margaret222 would like to point out that it snowed in London in October, November, December, January and February. Arctic Ice has pretty well reformed'

The whole point about climate change is the greater iclimate nstability and greater extremes or weather. In particular warmer oceans generate more rain and more snow, so the attempt to negate global warming actually confirms it!

And sure, Arctic ice reforms every winter -but not to the historical norm. Hence the discussion about the Arctic being icve'free by 2013. The previous comments about 'the computer' being uninformed have been very much vindicated.

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How to cut carbon

 **jeandebegles** wrote:

Monday, 9 March 2009 at 08:36 am (UTC)

We are clearly on the path of a catastrophic future, unless we cut by 50% the CO2 emissions of the earth by 2050. This means that



for industrialized countries such as UK and France, the cut must be much bigger: 80% at the least. This is a huge move that will take all the industries, and also every common people in his own way of living. Slashing by 4 or 5 our CO2 emissions means slashing by 4 or 5 times our car journeys, our air flights, our heating expenses, our energy use, and even our red meat. A carbon tax is the mandatory tool to put a price on carbon and to financially drive our purchases and the company investments towards low carbon products and services. This is the single policy decision to be met by the industrialized governments (Al Gore statement).

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Re: How to cut carbon

[peitersen](#) wrote:

Monday, 9 March 2009 at 09:02 am (UTC)

ZZz margaret222 zZZz

okay, so its still snowing in the Us and London.. Well, it was snowing here in Copenhagen last week too..

Read the article again please. And you will learn that the major climate change is not happening right now! But will happen to your kids and your Grandkids.

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Why have none of their other dire predictions come true?

[canadastan](#) wrote:

Monday, 9 March 2009 at 08:54 am (UTC)

And here I thought we were all going to be parboiled by now. Got any stock tips or horse racing tips I can bet against?

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Too bad that a warmer planet is actually better.

[canadastan](#) wrote:

Monday, 9 March 2009 at 09:08 am (UTC)

If you do the math,(you do remember math, don't you?) you would see that a warmer world would result in less deaths and a higher standard of living.

Global warming disciples are wrong about everything.

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Well this article has convinced me!

[canadastan](#) wrote:

Monday, 9 March 2009 at 09:13 am (UTC)

After all it has a picture of an old jawbone and some parched earth, so it must be true.

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A Very Poor Article

[frankiew](#) wrote:

Monday, 9 March 2009 at 09:24 am (UTC)

The idea that carbon dioxide should be suppressed because it is a greenhouse gas is wrong logically and scientifically. Logically



because carbon dioxide is a trace gas present in our atmosphere in only tiny amounts. The science of ancient times is pretty definite showing that atmospheric carbon dioxide carbon levels have been twenty times that of today. There be no evidence in the sediments of those times that temperature on Earth became too hot for life to survive on Earth. The imagined danger that an increase in carbon dioxide levels is going to destroy humanity lies only in the science deficient brains of those who perpetuate this myth about carbon dioxide causing global warming.

The temperature on this planet has changed only by 0.17% or 1 degree fahrenheit during the 20th century.

Where is the rationale in what has been written by Mr McCarthy considering that daily temperatures fluctuate by 20 to 30 degrees fahrenheit and by over 100 degrees fahrenheit from winter to summer in temperate areas? The passage of a strong cold front can drop temperatures by 30 degrees fahrenheit in a matter of hours.

This is a very poor article written by Mr McCarthy. The Earth has warm years and cool years, warm decades and cool decades.

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GROSS FAILURE at the Met Office

 **calum100** wrote:

Monday, 9 March 2009 at 09:35 am (UTC)

This dire message from an organisation that cannot even predict seasonal weather.

Summer 2008 in the UK was predicted by the Met Office to be the hottest ever on record. It wasn't.

Winter 2008/09 in the UK was predicted by the Met Office to be very mild. It turned out to be the coldest in 13 years.

To predict dire changes in climate based on flawed computer models flies in face of the satellite data that shows that over the past 30 years there has been no overall increase global temperature and the earth is currently experiencing global cooling.

By basically indulging in scaremongering this story highlights that scientists like Vicky Pope are incompetent and should be sacked.

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Starvation Awaits

 **frankiew** wrote:

Monday, 9 March 2009 at 09:38 am (UTC)

These are facts that has to be considered by all who advocate that atmospheric carbon dioxide levels should be decreased:

- 1) At levels of 150 parts per million of carbon dioxide in the atmosphere plants cease to grow.
- 2) At levels of 1,000 parts per million of carbon dioxide in the atmosphere plant growth is prolific provided there is enough water and warmth.
- 3) At 10,000 parts per million of carbon dioxide in the atmosphere it starts to get toxic for humans who are sensitive to carbon dioxide.
- 4) Present levels of atmospheric carbon dioxide is approximately 380 parts per million.

In view of the above atmospheric carbon dioxide should be increased. A decrease in atmospheric carbon dioxide levels would lead to poor plant growth resulting in low food production. Bad news for all humanity. Starvation.

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What A Dilemma

 **frankiew** wrote:

Monday, 9 March 2009 at 10:15 am (UTC)

The warmers keep telling us that increase levels of atmospheric carbon dioxide is causing global warming which is going to destroy Mankind. Carbon dioxide is suppose to increase global temperatures so the converse of this hypothesis should also hold and that is

that a decrease in the levels of carbon dioxide will lower global temperatures.

Now according to the warmers we are left with two choices.

1) Increase atmospheric carbon dioxide and become warmer and increase food production. But their logic says we are all doomed and warming causes destruction

2) Decrease atmospheric carbon dioxide levels and decrease global temperatures. And their logic advocates freezing to death and starving to death.

Make your choice. Nice and warm and a full belly. Or alive and cold and with an empty belly. What a dilemma these warmers have placed upon us and what logic.

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Simulation

 **johnofenfield** wrote:

Monday, 9 March 2009 at 10:24 am (UTC)

It is only a simulation.

There is no scientific method by which it can in any way be verified.

I also would like readers to consider that - by statistical analysis over a millennium- it can be shown that CO2 concentration is a POSSIBLE RESULT of global warming - not a cause. This is because changes in CO2 follow after changes in Global temperatures.

This article is pure scaremongering.

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