

Re: Doom is at the Door

Source: <http://sci.tech-archive.net/Archive/sci.energy/2005-02/0260.html>

From: Say not the Struggle nought Availeth (*nospam_at_nospam.net*)

Date: 02/07/05

Date: Mon, 07 Feb 2005 04:36:32 GMT

were you aware that malaria was endemic in Canada, Washington DC?

public health was the answer.

j.

That increased co2 can increase crop yields.

That warmer temperatures can increase live span.

j.

Tom Simonds wrote:

- > 06 February 2005
- > *The Independent on Sunday (UK)*
- > www.independent.co.uk
- >
- > *Apocalypse now: how mankind is sleepwalking to the end of the Earth*
- >
- > *Floods, storms and droughts. Melting Arctic ice, shrinking glaciers,*
- > *oceans*
- > *turning to acid. The world's top scientists warned last week that*
- > *dangerous*
- > *climate change is taking place today, not the day after tomorrow.*
- >
- > *You don't believe it? Then, says Geoffrey Lean, read this...*
- >
- > *Future historians, looking back from a much hotter and less hospitable*
- > *world, are likely to play special attention to the first few weeks of*
- > *2005.*
- > *As they puzzle over how a whole generation could have sleepwalked into*
- > *disaster – destroying the climate that has allowed human civilisation to*
- > *flourish over the past 11,000 years – they may well identify the past*
- > *weeks*
- > *as the time when the last alarms sounded.*
- >
- > *Last week, 200 of the world's leading climate scientists – meeting at*

sci.energy: Re: Doom is at the Door

> Tony
> Blair's request at the Met Office's new headquarters at Exeter – issued
> the
> most urgent warning to date that dangerous climate change is taking
> place,
> and that time is running out.
>
> Next week the Kyoto Protocol, the international treaty that tries to
> control
> global warming, comes into force after a seven-year delay. But it is
> clear
> that the protocol does not go nearly far enough.
>
> The alarms have been going off since the beginning of one of the warmest
> Januaries on record. First, Dr Rajendra Pachauri – chairman of the
> official
> Intergovernmental Panel on Climate Change (IPCC) – told a UN conference
> in
> Mauritius that the pollution which causes global warming has reached
> "dangerous" levels.
>
> Then the biggest-ever study of climate change, based at Oxford
> University,
> reported that it could prove to be twice as catastrophic as the IPCC's
> worst
> predictions. And an international task force – also reporting to Tony
> Blair,
> and co-chaired by his close ally, Stephen Byers – concluded that we
> could
> reach "the point of no return" in a decade.
>
> Finally, the UK head of Shell, Lord Oxburgh, took time out – just before
> his
> company reported record profits mainly achieved by selling oil, one of
> the
> main causes of the problem – to warn that unless governments take urgent
> action there "will be a disaster".
>
> But it was last week at the Met Office's futuristic glass headquarters,
> incongruously set in a dreary industrial estate on the outskirts of
> Exeter,
> that it all came together. The conference had been called by the Prime
> Minister to advise him on how to "avoid dangerous climate change". He
> needed
> help in persuading the world to prioritise the issue this year during
> Britain's presidencies of the EU and the G8 group of economic powers.
>
> The conference opened with the Secretary of State for the Environment,
> Margaret Beckett, warning that "a significant impact" from global
> warming
> "is already inevitable". It continued with presentations from top

sci.energy: Re: Doom is at the Door

> *scientists*
> *and economists from every continent. These showed that some dangerous*
> *climate change was already taking place and that catastrophic events*
> *once*
> *thought highly improbable were now seen as likely (see panel). Avoiding*
> *the*
> *worst was technically simple and economically cheap, they said, provided*
> *that governments could be persuaded to take immediate action.*
>
> *About halfway through I realised that I had been here before. In the*
> *summer*
> *of 1986 the world's leading nuclear experts gathered in Vienna for an*
> *inquest into the accident at Chernobyl. The head of the Russian*
> *delegation*
> *showed a film shot from a helicopter, and we suddenly found ourselves*
> *gazing*
> *down on the red-hot exposed reactor core.*
>
> *It was all, of course, much less dramatic at Exeter. But as paper*
> *followed*
> *learned paper, once again a group of world authorities were staring at a*
> *crisis they had devoted their lives to trying to avoid.*
>
> *I am willing to bet there were few in the room who did not sense their*
> *children or grandchildren standing invisibly at their shoulders. The*
> *conference formally concluded that climate change was "already*
> *occurring"*
> *and that "in many cases the risks are more serious than previously*
> *thought".*
> *But the cautious scientific language scarcely does justice to the sense*
> *of*
> *the meeting.*
>
> *We learned that glaciers are shrinking around the world. Arctic sea ice*
> *has*
> *lost almost half its thickness in recent decades. Natural disasters are*
> *increasing rapidly around the world. Those caused by the weather – such*
> *as*
> *droughts, storms, and floods – are rising three times faster than*
> *those –*
> *such as earthquakes – that are not.*
>
> *We learned that bird populations in the North Sea collapsed last year,*
> *after*
> *the sand eels on which they feed left its warmer waters – and how the*
> *number*
> *of scientific papers recording changes in ecosystems due to global*
> *warming*
> *has escalated from 14 to more than a thousand in five years.*
>
> *Worse, leading scientists warned of catastrophic changes that once they*

sci.energy: Re: Doom is at the Door

> *had*
> *dismissed as "improbable". The meeting was particularly alarmed by*
> *powerful*
> *evidence, first reported in The Independent on Sunday last July, that*
> *the*
> *oceans are slowly turning acid, threatening all marine life (see panel).*
>
> *Professor Chris Rapley, director of the British Antarctic Survey,*
> *presented*
> *new evidence that the West Antarctic ice sheet is beginning to melt,*
> *threatening eventually to raise sea levels by 15ft: 90 per cent of the*
> *world's people live near current sea levels. Recalling that the IPCC's*
> *last*
> *report had called Antarctica "a slumbering giant", he said: "I would say*
> *that this is now an awakened giant."*
>
> *Professor Mike Schlesinger, of the University of Illinois, reported that*
> *the*
> *shutdown of the Gulf Stream, once seen as a "low probability event", was*
> *now*
> *45 per cent likely this century, and 70 per cent probable by 2200. If it*
> *comes sooner rather than later it will be catastrophic for Britain and*
> *northern Europe, giving us a climate like Labrador (which shares our*
> *latitude) even as the rest of the world heats up: if it comes later it*
> *could*
> *be beneficial, moderating the worst of the warming.*
>
> *The experts at Exeter were virtually unanimous about the danger,*
> *mirroring*
> *the attitude of the climate science community as a whole: humanity is to*
> *blame. There were a few sceptics at Exeter, including Andrei Illarionov,*
> *an*
> *adviser to Russia's President Putin, who last year called the Kyoto*
> *Protocol*
> *"an interstate Auschwitz". But in truth it is much easier to find*
> *sceptics*
> *among media pundits in London or neo-cons in Washington than among*
> *climate*
> *scientists. Even the few contrarian climatologists publish little*
> *research*
> *to support their views, concentrating on questioning the work of others.*
>
> *Now a new scientific consensus is emerging – that the warming must be*
> *kept*
> *below an average increase of two degrees centigrade if catastrophe is to*
> *be*
> *avoided. This almost certainly involves keeping concentrations of carbon*
> *dioxide, the main cause of climate change, below 400 parts per million.*
>
> *Unfortunately we are almost there, with concentrations exceeding 370ppm*
> *and*

Re: Doom is at the Door

sci.energy: Re: Doom is at the Door

- > rising, but experts at the conference concluded that we could go briefly
- > above the danger level so long as we brought it down rapidly afterwards.
- > They added that this would involve the world reducing emissions by 50
- > per
- > cent by 2050 – and rich countries cutting theirs by 30 per cent by 2020.
- >
- > Economists stressed there is little time for delay. If action is put off
- > for
- > a decade, it will need to be twice as radical; if it has to wait 20
- > years,
- > it will cost between three and seven times as much.
- >
- > The good news is that it can be done with existing technology, by
- > cutting
- > energy waste, expanding the use of renewable sources, growing trees and
- > crops (which remove carbon dioxide from the air) to turn into fuel,
- > capturing the gas before it is released from power stations, and –
- > maybe –
- > using more nuclear energy.
- >
- > The better news is that it would not cost much: one estimate suggested
- > the
- > cost would be about 1 per cent of Europe's GNP spread over 20 years;
- > another
- > suggested it meant postponing an expected fivefold increase in world
- > wealth
- > by just two years. Many experts believe combatting global warming would
- > increase prosperity, by bringing in new technologies.
- >
- > The big question is whether governments will act. President Bush's
- > opposition to international action remains the greatest obstacle. Tony
- > Blair, by almost universal agreement, remains the leader with the best
- > chance of persuading him to change his mind.
- >
- > But so far the Prime Minister has been more influenced by the President
- > than
- > the other way round. He appears to be moving away from fighting for the
- > pollution reductions needed in favour of agreeing on a vague pledge to
- > bring
- > in new technologies sometime in the future.
- >
- > By then it will be too late. And our children and grandchildren will
- > wonder – as we do in surveying, for example, the drift into the First
- > World
- > War – "how on earth could they be so blind?"
- >
- > WATER WARS
- >
- > What could happen? Wars break out over diminishing water resources as
- > populations grow and rains fail.
- >

sci.energy: Re: Doom is at the Door

> *How would this come about? Over 25 per cent more people than at present
> are
> expected to live in countries where water is scarce in the future, and
> global warming will make it worse.*

>
> *How likely is it? Former UN chief Boutros Boutros–Ghali has long said
> that
> the next Middle East war will be fought for water, not oil.*

>
> *DISAPPEARING NATIONS*

>
> *What could happen? Low–lying island such as the Maldives and Tuvalu –
> with
> highest points only a few feet above sea–level – will disappear off the
> face
> of the Earth.*

>
> *How would this come about? As the world heats up, sea levels are rising,
> partly because glaciers are melting, and partly because the water in the
> oceans expands as it gets warmer.*

>
> *How likely is it? Inevitable. Even if global warming stopped today, the
> seas
> would continue to rise for centuries. Some small islands have already
> sunk
> for ever. A year ago, Tuvalu was briefly submerged.*

>
> *FLOODING*

>
> *What could happen? London, New York, Tokyo, Bombay, many other cities
> and
> vast areas of countries from Britain to Bangladesh disappear under tens
> of
> feet of water, as the seas rise dramatically.*

>
> *How would this come about? Ice caps in Greenland and Antarctica melt.
> The
> Greenland ice sheet would raise sea levels by more than 20ft, the West
> Antarctic ice sheet by another 15ft.*

>
> *How likely is it? Scientists used to think it unlikely, but this year
> reported that the melting of both ice caps had begun. It will take
> hundreds
> of years, however, for the seas to rise that much.*

>
> *UNINHABITABLE EARTH*

>
> *What could happen? Global warming escalates to the point where the
> world's
> whole climate abruptly switches, turning it permanently into a much
> hotter*

Re: Doom is at the Door

- > *and less hospitable planet.*
- >
- > *How would this come about? A process involving "positive feedback"*
- > *causes*
- > *the warming to fuel itself, until it reaches a point that finally tips*
- > *the*
- > *climate pattern over.*
- >
- > *How likely is it? Abrupt flips have happened in the prehistoric past.*
- > *Scientists believe this is unlikely, at least in the foreseeable future,*
- > *but*
- > *increasingly they are refusing to rule it out.*
- >
- > **RAINFOREST FIRES**
- >
- > *What could happen? Famously wet tropical forests, such as those in the*
- > *Amazon, go up in flames, destroying the world's richest wildlife*
- > *habitats*
- > *and releasing vast amounts of carbon dioxide to speed global warming.*
- >
- > *How would this come about? Britain's Met Office predicted in 1999 that*
- > *much*
- > *of the Amazon will dry out and die within 50 years, making it ready for*
- > *sparks – from humans or lightning – to set it ablaze.*
- >
- > *How likely is it? Very, if the predictions turn out to be right. Already*
- > *there have been massive forest fires in Borneo and Amazonia, casting*
- > *palls*
- > *of highly polluting smoke over vast areas.*
- >
- > **THE BIG FREEZE**
- >
- > *What could happen? Britain and northern Europe get much colder because*
- > *the*
- > *Gulf Stream, which provides as much heat as the sun in winter, fails.*
- >
- > *How would this come about? Melting polar ice sends fresh water into the*
- > *North Atlantic. The less salty water fails to generate the underwater*
- > *current which the Gulf Stream needs.*
- >
- > *How likely is it? About*
- >
- > *evens for a Gulf Stream failure this century, said scientists last week.*
- >
- > **STARVATION**
- >
- > *What could happen? Food production collapses in Africa, for example, as*
- > *rainfall dries up and droughts increase. As farmland turns to desert,*
- > *people*
- > *flee in their millions in search of food.*
- >

sci.energy: Re: Doom is at the Door

- > *How would this come about? Rainfall is expected to decrease by up to 60*
- > *per*
- > *cent in winter and 30 per cent in summer in southern Africa this*
- > *century. By*
- > *some estimates, Zambia could lose almost all its farms.*
- >
- > *How likely is it? Pretty likely unless the world tackles both global*
- > *warming*
- > *and Africa's decline. Scientists agree that droughts will increase in a*
- > *warmer world.*
- >
- > **ACID OCEANS**
- >
- > *What could happen? The seas will gradually turn more and more acid.*
- > *Coral*
- > *reefs, shellfish and plankton, on which all life depends, will die off.*
- > *Much*
- > *of the life of the oceans will become extinct.*
- >
- > *How would this come about? The oceans have absorbed half the carbon*
- > *dioxide,*
- > *the main cause of global warming, so far emitted by humanity. This forms*
- > *dilute carbonic acid, which attacks corals and shells.*
- >
- > *How likely is it? It is already starting. Scientists warn that the*
- > *chemistry*
- > *of the oceans is changing in ways unprecedented for 20 million years.*
- > *Some*
- > *predict that the world's coral reefs will die within 35 years.*
- >
- > **DISEASE**
- >
- > *What could happen? Malaria – which kills two million people worldwide*
- > *every*
- > *year – reaches Britain with foreign travellers, gets picked up by*
- > *British*
- > *mosquitos and becomes endemic in the warmer climate.*
- >
- > *How would this come about? Four of our 40 mosquito species can carry the*
- > *disease, and hundreds of travellers return with it annually. The insects*
- > *breed faster, and feed more, in warmer temperatures.*
- >
- > *How likely is it? A Department of Health study has suggested it may*
- > *happen*
- > *by 2050: the Environment Agency has mentioned 2020. Some experts say it*
- > *is*
- > *miraculous that it has not happened already.*
- >
- > **HURRICANES**
- >
- > *What could happen? Hurricanes, typhoons and violent storms proliferate,*

sci.energy: Re: Doom is at the Door

> grow
> even fiercer, and hit new areas. Last September's repeated battering of
> Florida and the Caribbean may be just a foretaste of what is to come,
> say
> scientists.
>
> How would this come about? The storms gather their energy from warm
> seas,
> and so, as oceans heat up, fiercer ones occur and threaten areas where
> at
> present the seas are too cool for such weather.
>
> How likely is it? Scientists are divided over whether storms will get
> more
> frequent and whether the process has already begun.
>
> -----
>
> <http://news.independent.co.uk/world/environment/story.jsp?story=608209>
>
> -----
>
>