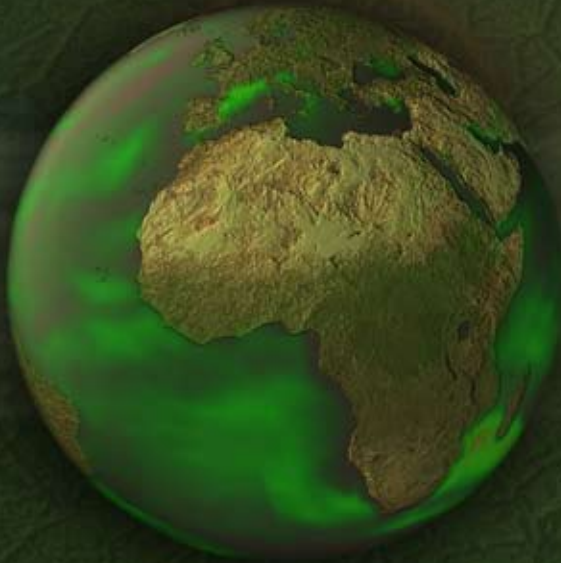


Cool Thinking on Climate Change

Why the EU's climate alarmism is
both mistaken and dangerous

Roger Helmer MEP




The
Bruges
Group 



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alarmism is both mistaken
and dangerous



*“The improver of natural knowledge absolutely
refuses to acknowledge authority, as such.
For him, scepticism is the highest of duties;
blind faith the one unpardonable sin”.*

Thomas H. Huxley, *Darwin’s Bulldog*



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and dangerous

Roger Helmer MEP

Roger Helmer is a Non-Attached Member of the European Parliament

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About the Author


Roger was first elected to the European parliament in 1999 and has been kept very busy ever since representing the interests of his 4.1 million constituents from in the East Midlands.

In June 2004 he was re-elected for a second term and currently sits on several committees: Unemployment, Petitions, Constitutional Affairs and the Parliament's Temporary Committee on Climate Change. During the 1999/04 parliament, Roger was also a very active member of the "interparliamentary delegation" to ASEAN (the nations of South East Asia) plus Korea. In the new parliament these two areas have been split and Roger now sits as a full member on the Korea delegation.

Born in 1944, Roger attended King Edward VI Grammar School in Southampton (1955 - 62) and then won a State Scholarship to Churchill College, Cambridge, where he read mathematics, graduating in 1965 with a B.A. and subsequently an M.A.

He started his business career in 1965 with Procter & Gamble in Newcastle-upon-Tyne, going on to hold senior marketing and general management appointments in a range of companies, including well-known multinationals like Readers Digest, National Semiconductor, Coats Viyella and the whisky firm United Distillers, now part of the drinks conglomerate Diageo. During the course of his business career he lived and worked in Hong Kong, Singapore, Thailand, Malaysia and Korea, and ran businesses in the Philippines, Vietnam, Guam and Saipan.

He has found his decades of business experience invaluable in the European parliament, not least in helping him to fight the battle against the tide of intrusive and prescriptive EU regulation and red tape which is causing great damage to economic competitiveness across Europe. He has earned a reputation - and even the grudging respect of political opponents - for his clear, consistent and forthright approach to the question of Britain's relationship with the EU. Roger believes the British people have the right, the ability, the will, and the manifest destiny to govern themselves.



With like minded-colleagues, Roger has developed close relationships with conservative political groups in the USA, and has been a regular speaker at American conferences. He was recently appointed “Adam Smith Scholar” by ALEC, the American Legislative Exchange Council.

Roger has published two books on European issues, *Straight Talking on Europe* in 2000, followed by *A Declaration of Independence* in 2002. As well as producing a DVD and pamphlet on climate alarmism entitled *Straight Talking on Climate Change* in 2008.

Roger was appointed the Honorary Chairman of The Freedom Association on St George’s day in 2007, a role which he continues to hold.

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Author's foreword

I wrote much of this paper during the intense cold snap that hit Britain in early February 2009. Snow fell. Schools and airports closed. Buses stopped running. Roads were impassable, and drivers had to be rescued from snow-bound vehicles. My central heating system started to play up. Then to add to the misery, local councils, short of grit and salt for the roads after the earlier January cold snap, began to run out. Between chapters, I took a reluctant greyhound for long walks through a snowy wasteland.

Of course no one should draw conclusions about long-term climate trends from one cold winter, however exceptional. But it does rather set the context for the debate.

There are two key insights in this paper:

1. The modest climate change we observe today is entirely consistent with well-established, long-term, natural climate cycles.
2. Without radical changes to energy policy Britain will face a disastrous energy supply position by the middle of the next decade with power cuts, rolling blackouts and three-day weeks – perhaps for an extended period.

I will argue that our misplaced focus on the chimera of climate change is damaging our prosperity and distorting our priorities. We should instead be addressing the urgent issue of energy security. If we do not, if we fail to start building new generating capacity now, we shall find ourselves shivering in the dark within the next decade.

I am hugely grateful to the Bruges Group for inviting me to author this paper, which brings together much of my work on climate and energy issues over the last two years.

Cool Thinking on Climate Change

The EU: Fully paid-up Climate Alarmists

The European Commission has declared an hubristic objective of ensuring that global warming should not exceed 2°C above what it calls “pre-industrial levels”. I recently tabled a Written Question, pointing out that before the industrial period (however defined) global temperatures varied widely, and were sometimes much warmer than today’s, sometimes cooler, and therefore that “2°C above pre-industrial levels” was a meaningless term.


Their reply was unrepentant: *“The Commission knows that recent increases in average temperature are not due to natural climatic variations or cycles but to human activities. This conclusion was one of the main highlights of the 4th IPCC report issued in 2007. This change is occurring much more rapidly than in past natural processes”*.

On the rate of change, the Commission is just plain wrong. There is plenty of evidence in the record that in the past, large natural changes in mean global temperatures occurred quite rapidly, and certainly more quickly than the 1975/98 warming that prompted climate alarmism.¹

They continued: *“The 4th IPCC clearly points at the potentially very large irreversible impacts that climate change could have on humans and ecosystems if temperature increases above 2°C compared to pre-industrial levels”*.

They have failed to note that temperatures have indeed exceeded today’s levels by this sort of amount, during the Eemian Interglacial (c. 110,000 BP) during the Holocene maxima (5 to 8000 years BP) during the Roman Optimum and during the Mediæval Warm Period. On none of these

1 For a good paper dealing with a sharp temperature rise in the 18th century (and DEFRA’s attempts to disguise it) see:
<http://www.parliament.the-stationery-office.com/pa/ld200506/ldselect/ldconaf/12/12we11.htm>



occasions did we experience “irreversible impacts”. On the contrary, we saw warm periods followed by cyclical cooling, as we will again.

The EU’s Renewable Energy and Climate Change Package

Ignoring the doubts, the Commission proposes to forge ahead with eye-wateringly expensive initiatives designed to mitigate climate change. Key elements of this package include the extension of the Emissions Trading System (known internationally as “Cap’n’Trade”); the Clean Development Mechanism (CDM, an international extension of ETS); a framework for carbon capture and storage (which is not yet operational on an industrial scale); strict renewables targets; and a directive on CO₂ emissions from cars.


The estimated cost of this programme is €73 billion a year across the EU by 2020. In the UK, it will cost £9 billion a year by 2020. It is expected to force a million more households into fuel poverty. It is likely to raise average domestic fuel bills by up to £200 a year, while the total economic cost would average around £600 per family². We will return to the perverse and malign consequences of this programme in more detail later on.

EU competences: The Great Power-Grab

The EU already has established competence under the existing Treaties for environmental policy, and it has a well-established track record in extending its powers under any rubric to include areas not previously covered (for example when the EU ambushed the Major government by insisting that the Working Time Directive was about Health & Safety – an EU competence – and not, as we thought, Employment, where the UK had an opt-out).

Similarly in the Climate and Energy Package, the boundaries between an existing EU competence (environment) and energy (where it does not yet have competence) become so blurred as to be indistinguishable. As I write,

2 Open Europe: <http://www.openeurope.org.uk/media-centre/pressrelease.aspx?pressreleaseid=85>



the ratification of the Lisbon Treaty is still in limbo, but this new Treaty explicitly provides for an EU competence in energy.


So why is the EU pursuing the climate issue with such vigour? To be fair, they are probably sincere in their adoption of the alarmist position. But they also see very clear advantages for the European project. This is an excellent example of the EU doctrine of the “beneficial crisis”. Global terrorism? The EU needs more police and security resources, more central control. Global financial crisis? The EU needs a European Financial Regulator, and more central control. Global Warming? The EU needs more control over energy policy, over tax, over emissions, over industry, over everything.

The attitude was beautifully illustrated by British Foreign Secretary David Miliband, who proposed that in order to persuade the people to love the EU, it should perhaps be re-christened “The Environmental Union”. But Miliband should proceed with caution. Ask the general public whether we should do something about climate change, and they will generally say “Yes”. Ask them to pay for it, and they run a mile. Successive opinion polls show that the public are increasingly sceptical about climate alarmism, and increasingly unwilling to see “green taxes” as anything other than revenue-raising devices.

The excessive commitment to climate policies also illustrates another problem of the Brussels system. The Commission is almost impervious to genuine public opinion (consider its breathtaking contempt for the results of referenda on the EU Constitution or the Lisbon Treaty).


But on the other hand it is far too willing to listen to strident lobby groups, or Non-Governmental Organisations (NGOs). These NGOs are frequently run by single-issue zealots who have disproportionate access to the corridors of power.

Indeed there is a dangerously incestuous relationship between NGOs and the Commission, which, bizarrely, funds many of the NGOs it listens to.



Recently the parliament has organised a series of “Agoras” (a pretentious name for conferences) where NGOs come to discuss issues like climate change or the EU Constitution/Lisbon Treaty. I have heard a senior Vice-President of the parliament, Green MEP Gérard Onesta, argue, without a hint of irony, that representative democracy has failed (by which he means that the people voted against the EU Constitution) and that we must therefore now seek to develop “Participative Democracy” – a debate between representatives of interest groups (NGOs) and the EU institutions. The processes of government would thus become an entirely circular debate within Brussels, without any input from (or accountability to) the people.

The Commission would live in a Hall of Mirrors where its own views would be reflected back from a hundred NGOs that the Commission itself was funding. It could safely ignore the troublesome interests and aspirations of ordinary people.



Climate Change: The New Religion


Climate change is not science. It is our new 21st century religion.

Like religion, the theory of anthropogenic global warming (AGW) generates passionate emotions. Like religion, it is rarely the subject of rational and measured debate. As with religion, dissenters are branded “heretics”. As with Mediæval Catholicism, it is possible to clear your conscience by buying ‘Papal Indulgences’, or as we now call it, carbon-offsetting (and some of those selling such programmes today may be as much charlatans as the itinerant Mediæval priests offering get-out-of-purgatory cards).

Like religion, Warmism offers predictions for the future which the faithful take as Gospel. Like religion, it points to the risk of a terrible Armageddon – literally the fiery furnace: a Mediæval vision of Hell. Yet like religion, it also offers salvation to the faithful, if only they will change their ways and adopt its prescriptions of poverty and abstinence. David Henderson, Visiting Professor at the Westminster Business School and former Head of the Economics and Statistics Department of the OECD, in his IEA book *The Role of Business in the Modern World*³, explores the concept of “Global Salvationism”, showing how movements of this kind can be exploited by governments to extend the power and rôle of the state.

The level of threats and abuse hurled at dissenters by the Warmists suggests that they are replacing reason with invective. And when we have worn the religious analogy thread-bare, there are darker parallels to hand. There have been several (apparently serious) calls for “climate criminals” to face Nuremberg-style trials for crimes against humanity. The use of the term “Climate Change Denier” by Warmists to describe climate optimists is a clear read-across from the term “Holocaust Denier”, which from the Warmist point of view is an attractive metaphor, since Holocaust Denial is both delusional and disreputable. And James Hansen of NASA, Al Gore’s climate change guru, has recently called coal-fired power stations “factories

3 David Henderson, *The Role of Business in the Modern World - Progress, Pressures, and Prospects for the Market Economy*. Institute of Economic Affairs, 2004.



of death”, and has dubbed coal trains “death trains”, in another clear and scandalous Holocaust metaphor.

Nevertheless, there is clearly a predominant view in government, in academia and in the media which allows lazy journalists and commentators to speak of a “consensus”, and to dismiss dissenters as an eccentric minority. So we need to understand how such a consensus can arise.

Here the founding text is Booker and North’s *Scared to Death*⁴, which examines the way in which a whole range of scares – food scares, disease scares and so on – have come and gone. Hyped as the end of mankind, they eventually fade away, and the dire predictions in the media are forgotten. The mechanism is straightforward. First a few scientists come up with some more or less genuine proposition – in this case the fact that CO₂ is, indeed, a greenhouse gas (GHG).


Few people are aware that the concept of CO₂ as a greenhouse gas, originally mooted by the Swedish scientist Arrhenius in the 19th century, was proposed in the fifties not as a threat of future warming, but as a possible global response to the perceived threat of global *cooling*. How do we stop the coming Ice Age, they asked?

Journalists take the Warmist story and add their own speculation about possible consequences, always hyping the most extreme speculation, because anything less is not news. Scientists, like politicians, love to see their names in print – it helps them get funding, and to get their papers published. So they have an incentive to keep feeding the journalists.

Then concerned members of the public start to write to their politicians, who would rather be seen to “do something” than to dismiss the fears of their constituents. So the scientists, the media and the political establishment find themselves in a self-reinforcing loop.

Enter the NGOs. If you are Greenpeace or a Friend of the Earth, then your two key (but unstated) objectives are survival and fund-raising. Both of

4 Christopher Booker & Richard North, *Scared to Death*, Continuum Books, 2007



these require headlines, and threats, and bogeymen. This year's threat must be worse than last year's. *Did we say sea level rise of ten feet? We have new research saying twenty!* Such groups get straight into the politics/media/science loop with organised write-in campaigns from their members to the press and to politicians, giving another turn to the screw.

A prominent Warmist, Stephen Schneider, summed it up well. *"We need to capture the public's imagination. That entails getting loads of media coverage. So we have to offer up scary scenarios, make simplified, dramatic statements, and make little mention of any doubts we might have."* Schneider has spent a long time since 1989, when he made these comments, insisting he was taken out of context. So I checked it out.⁵ It is true that Schneider was discussing the tension which alarmist scientists feel between the need for honesty and their urge to sensationalise. But it is still a fair statement of their motivation.


Sir John Houghton oversaw each of the first three much-touted reports of the Intergovernmental Panel on Climate Change (IPCC). His comment is priceless: *"Unless we announce disasters, no one will listen."*⁶

It is worth noting that Warmism came to the fore in the 1990s. The fall of the Berlin Wall, the final collapse of communism, took place in 1989. A large number of disappointed leftist agitators and unwashed Trots saw their world-view shattered, and cast about for a new cause. And Warmism suited them well. It gave them a fig-leaf of moral justification for their hatred of capitalism and big corporations, and it enabled them to segue smoothly from communism to environmentalism, while retaining their anti-growth, anti-energy, anti-big-oil, anti-capitalist, pro-big-government agenda.

A case in point: Daniel Cohn-Bendit MEP was breaking the pavements of Paris to throw at the *Gendarmerie* in the French troubles of 1969. Now he leads the Green group in the European parliament.

5 Original article: Jonathan Schell, *Discover*, pp. 45-48, Oct. 1989; quoted by Christopher C Horner, *Red Hot Lies* Regency, 2008 pg 172.

6 Sir John Houghton, *Global Warming, the Complete Briefing*, Cambridge University Press, 1994



Some scares are time-limited in their nature, like the Millennium Bug. Remember that? Computers could only cope with two digits in the year-field, we were told. The moment we hit the year 2000, systems would crash, banks would cease to operate (that took another nine years) weapons systems would fail, planes would fall out of the sky, civilisation would end. Tony Blair in 1998 said that the Y2K Millennium Bug was “one of the most serious problems facing British business and the global economy today”⁷.

Then Y2K came and went. And what happened? Nothing at all. I believe that a couple of parking meters in Australia and a lift in Hong Kong may have failed. Companies had paid many millions to consultants to “future-proof” their systems (a bit like the Papal Indulgences and the carbon-offsetting scam) yet those who had done the work fared no better than those who had not. Proof, if proof were needed, that the whole media/political establishment can buy into a scare that has no substance at all. Like Warmism.


It is notable that while climate alarmism is entrenched in Western societies, it is much less well accepted elsewhere. Russian and Chinese scientists are less willing to accept it. A recent report from an influential Japanese committee, the Japan Society of Energy and Resources, says that “recent climate change is driven by natural cycles, not human industrial activity”, and adds for good measure that the use of computer models to make long-term climate predictions is “akin to ancient astrology”⁸. It is an excellent thing that we in the West have a free press, but perhaps the price we pay for it includes media scares and climate alarmism.

Before we get into the substance and the science of Warmism, there are several myths and misconceptions we need to shoot down.

Climate Change Deniers

7 Michael Harrison Millennium Bug fears prompt Blair to call for contingency plans *The Independent*, 23rd Jan 1998

8 <http://wattsupwiththat.com/2009/02/25/japans-society-of-energy-and-resources-disses-the-ippc-says-recent-climate-change-is-driven-by-natural-cycles-not-human-industrial-activity/>



We have already come across this phrase. But of course there are no climate change deniers. No sane person can deny that the climate changes, and we will look at historical climate changes in a moment. Climate change happens. Always has, always will.

“There is a scientific consensus”

No there is not. Hundreds of scientists have signed letters to governments protesting against the distortions of policy and downright waste inherent in climate mitigation policies. Tens of thousands have signed the Oregon Petition⁹ challenging Warmism. Research by the Heartland Institute in the US amongst working climatologists, and surveys of recent peer-reviewed papers, show a range of views – some for, some against, and many arguing that the jury is still out. There are not enough data.

“Global Warming is happening now”

Not so. In fact the hottest year in recent memory was 1998. Since then, average global temperatures have plateaued, and indeed in the last four years have declined. Warmists insist that this is a short term effect of *El Niño*. They tend to blame every anomaly on *El Niño*. Or *La Niña*.


“Climate sceptics are climate criminals”

There is a facile assumption that those who reject the Great Carbon Myth are entirely careless of the environment, and are wedded to waste and pollution. In a recent letter to the press Dr. Mike Edwards of CAFOD, the Catholic relief agency, disingenuously implied that sceptics were content to see “whole eco-systems destroyed”.¹⁰

Not a bit of it. In my experience, sceptics are every bit as concerned about the environment as anyone else, and they are in despair as they

9 <http://www.petitionproject.org/>

10 *The Sunday Telegraph* (01.02.2009) Letters: <http://www.telegraph.co.uk/comment/letters/4403263/Americas-1970s-style-policies-threaten-a-trade-war.html>



see massive funds, which could address humanitarian and environmental problems, diverted to pointless and futile mitigation measures.

In this context it is worth recalling Bjørn Lomborg *The Skeptical Environmentalist* and his Copenhagen Consensus¹¹. Lomborg brought together a team of scientists, economists and development experts, and he asked the question the other way round. Instead of saying “How do we tackle climate change?” he asked “If we had a trillion dollars to spend, how would we most effectively benefit mankind?”. His experts came up with a series of potential projects, including climate mitigation; subjected them to economic analysis for cost effectiveness; and then ranked them accordingly.

Climate mitigation came not only at the bottom of the list, but almost off the chart. It is a rotten waste of money. Provision of micro-nutrients (vitamins) to children in third-world countries came top – it’s cheap and very effective. After that a range of measures – providing education, water and sanitation, eradication of endemic diseases like malaria. All these measures do far more for mankind, for less money, than climate mitigation.

As a climate sceptic, I am keen to see sulphur dioxide removed from the emissions of coal-fired power stations, to prevent acid rain. But I do not support the removal of CO₂ (carbon capture and storage, CCS, or carbon sequestration) because: (A) It’s unnecessary; (B) The technology is very difficult; (C) It’s hugely expensive and wasteful.

“Every extreme weather event is caused by climate change”

In 2004, heavy rain on Dartmoor sent a spate of rushing water down the steep valleys on the edge of the moor, leading to the flood disaster in the Cornish village of Boscastle. This was an extreme weather event that many blamed on climate change. Yet I remember being in Devon as a child on holiday in 1952 when the Lynmouth flood disaster struck. It was

11 Ed: Bjørn Lomborg *Global Crises, Global Solutions* Cambridge University Press, 2004. See also www.copenhagenconsensus.com

a remarkably similar event to Boscastle, although sadly, unlike Boscastle, many died.

When New Orleans was struck by the Hurricane Katrina in August 2005, Warmists were quick to blame it on climate change. Of course they chose not to remember the very comparable disaster in the Great Galveston Hurricane of 1900, with a death toll estimated at 6,000 to 12,000.

Warmists always say that warming will increase the incidence of extreme weather events, and they like to quote insurance statistics, which show a reassuringly exponential curve. But the reason is that we have more people, more houses in danger zones, more property and more insurance. Not more storms.

Sober studies of extreme weather events over the last century show some random variations between decades, but no particular trend¹².

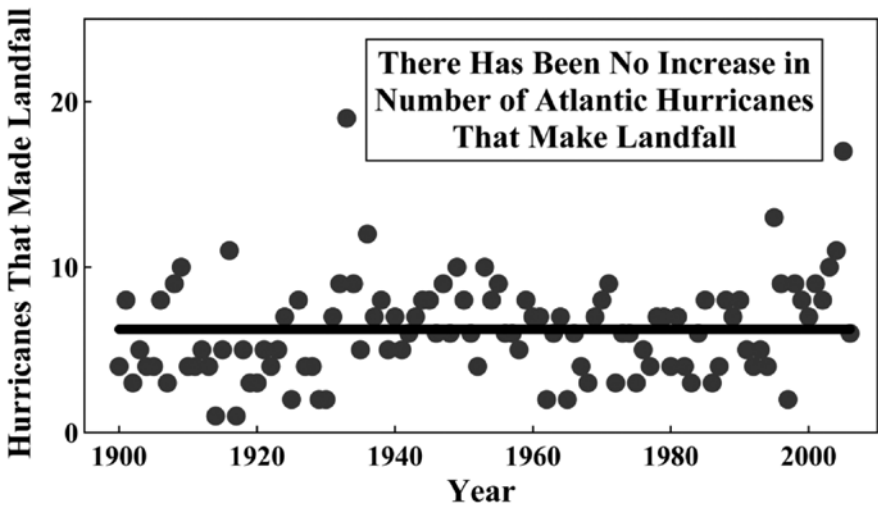


Fig 1: No increase in Atlantic hurricanes making landfall. Dr Arthur Robinson, Oregon Institute of Science and Medicine

12 for example, see hurricane data from the USA since 1851: <http://www.nhc.noaa.gov/pastdec.shtml>

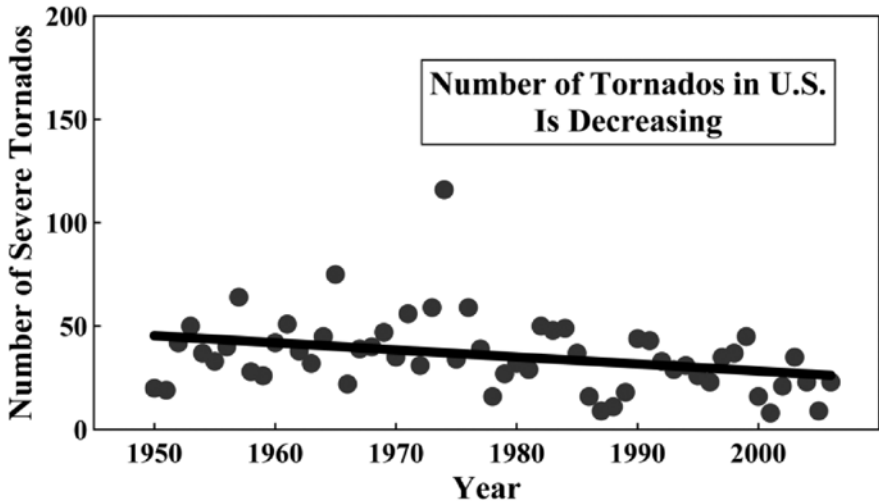



Fig 2: Decrease in frequency of Tornadoes in the US. Dr Arthur Robinson, Oregon Institute of Science and Medicine.

“CO₂ is a dangerous pollutant”

No. The truth is that CO₂ is absolutely vital to life on earth. Without it, we should be locked into a permanent Ice Age. No plants would grow, no life could exist. Ironically, higher levels of atmospheric CO₂ deliver more biomass and higher agricultural yields – handy for feeding the world’s growing population. There is a vast natural CO₂ cycle between the atmosphere, the oceans, the biosphere, and the earth itself. Volcanoes emit extraordinary quantities of CO₂.

While Warmists agonise over anthropogenic CO₂ emissions, these are estimated to be only about 4% of the natural carbon cycle. And while today’s atmospheric CO₂ levels at around 385 ppm are the highest in recent times, levels have been much higher over geological time – compared to former geologic times, our present atmosphere is CO₂-impoverished.¹³

13 For an easy to read explanation of CO₂ trends in relation to climate, go to <http://ff.org/centers/csspp/library/co2weekly/2005-08-18/dioxide.htm>
 For a comparison of the climates in the Carboniferous and Present eras, go to http://www.geocraft.com/WVFossils/Carboniferous_climate.html



During the late Ordovician period, around 450 million years ago, concentrations of CO₂ were over ten times higher than today's – and that was during an Ice Age!

“A warming climate will bring disaster”

In his excellent book *An Appeal to Reason*¹⁴ Lord Lawson of Blaby (Formerly Nigel Lawson, Chancellor of the Exchequer) points out that successful human societies can flourish in Singapore (average temperature around 30°C) and in Oslo (average around 6°C). We are a very adaptable species.


We should recall that rich Americans from New England frequently choose to retire to Florida. They are opting for an increase in mean temperatures of around 10°C, because they prefer the warmth and the sunshine. Warming is not all bad.

Warmists love to point to excess deaths, usually among elderly people, during hot weather – for example the Paris heat-wave of 2003. What they rarely mention is that far more excess deaths are caused by extreme cold, so warming will result in reduced mortality. And as a matter of historical record, great human achievements tend to occur in warmer periods (think Roman Empire, and Mediæval cathedral building) than in cooler periods (think Dark Ages). The reason? In cooler times it is literally all hands to the plough. Everyone must work on the land merely to grow enough food. In warmer times, excess food production allows the development of a non-agricultural work-force, which can be an army (Roman Empire) or stonemasons (cathedrals).

“Sea Level rise is a major threat”

This idea has been driven deep into the public (and media) consciousness by disaster movies like *The Day After Tomorrow*, and Al Gore's *An Inconvenient Truth*, so now it seems widely accepted as fact. It is no such thing. It is sobering to recall that the estimates for 21st Century sea level rise

14 Nigel Lawson, *An Appeal to Reason*, Duckworth Overlook, 2008



in successive IPCC reports have been heavily scaled back, and currently range from 7 to 23 inches (compared to the current average of around six inches per century). But actual studies of sea level rise show no change in the historic rate¹⁵. Sea levels rose quite rapidly ten thousand years ago, with ice melt as the current interglacial got underway, and the rate has slowed since. There are computer projections of an increased rate, but no actual measurements to support them.

“The Earth’s Ice Caps are melting”

Given that average global temperatures have increased slightly since 1850, you might expect some ice melt, and indeed there has been some marginal melting in both the Arctic and Antarctic. But ice melt in Greenland should not be a surprise. Remember that when the Vikings got to Greenland early in the Mediæval Warm Period, it was – well – *green!*

But increased precipitation has led to further ice deposition on the main Antarctic land mass (which accounts for nine tenths of the world’s ice) and total global ice mass is broadly constant. The Antarctic has been cooling for decades.

There was a flurry of media interest in early 2009 over a new report saying that the Antarctic was now warming. This research however is highly suspect – some would say scandalous. The report, from a team led by Professor Eric Steig, and published in *Nature*, claimed to prove that the Antarctic has been heating up after all. As on similar occasions in the past, all the usual supporters of the cause were called in to whoop up its historic importance.

The report did not bear scrutiny. Steig and his team had used a combination of satellite and ground station data. But because of the paucity of meteorological ground stations in the Antarctic, they had interpolated the data for the vacant areas, using some formula of their own which they did not reveal. Or in plain language, they guessed.

15 <http://www.csr.utexas.edu/gmsl/main.html>

It cannot be coincidental that Steig’s team included Michael Mann, responsible for the infamous “Hockey Stick Graph”, previously promoted by the IPCC but later shown to be nonsense, and perhaps the most discredited scientific artifact since the Piltdown Man. The Steig report was splendidly dismembered by Christopher Booker in *The Sunday Telegraph*.¹⁶

The discredited Hockey-Stick graph:

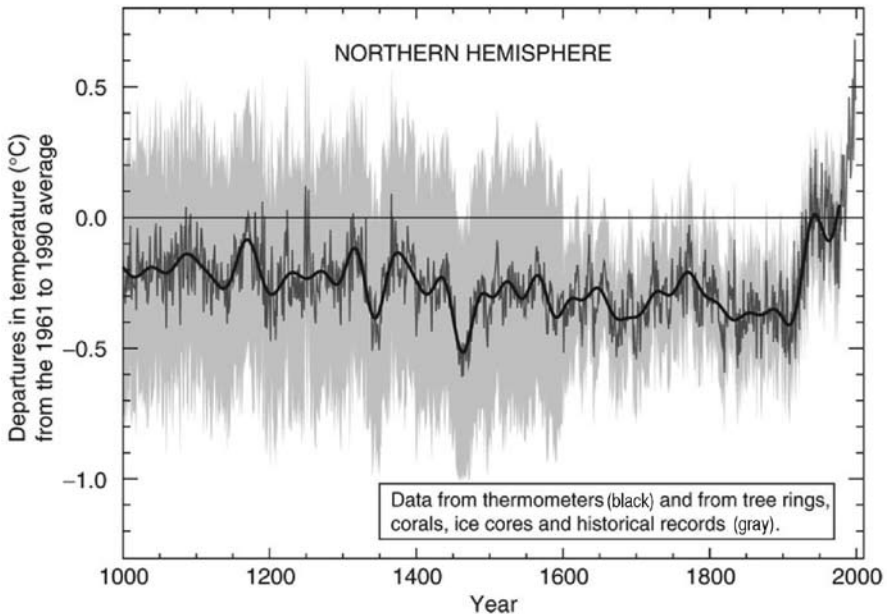


Fig 3: Mann’s ‘hockey stick’ graph, showing clear temperature rise in the last 100 years, as used in the Third Assessment Report by the IPCC in 2001.

16 Christopher Booker, Despite the hot air, the Antarctic is not warming up, *The Sunday Telegraph*, 1st Feb, 2009

Contrast this with the IPCC graph clearly showing higher temperatures in the Mediæval Warm Period:

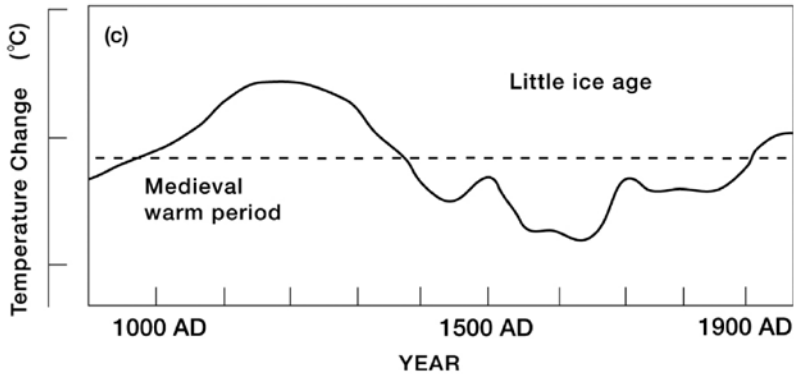


Fig 4: The last 1000 years of Earth temperatures from tree rings, ice cores and thermometers, as shown in the IPCC's Climate Change, 1995

Dr Vicky Pope, head of climate change advice at the UK Met Office, said recently (Feb 2009) that there is little evidence to support claims that Arctic ice has reached a tipping point and could disappear within a decade or so, as some reports have suggested.¹⁷

Along with the melting ice caps, we also have the melting glaciers. The world has warmed slightly since the Little Ice Age, so we should expect some reduction in glaciation. There has indeed been a modest retreat by glaciers over the last 200 years. But it correlates very poorly with the much more recent rise in atmospheric CO₂. Again, clear evidence for natural climate cycles and against AGW theory.

A particular piece of alarmist spin is worth mentioning: the great rivers of India (they say) are glacier-fed, and the loss of Himalayan glaciers would create an epic disaster. But of course the rivers are not primarily fed by glaciers, but by snow-melt. And the snow keeps falling, and melting, in the Himalayas.

17 Vicky Pope Scientists must rein in misleading climate change claims, *The Guardian*, 11th Feb, 2009
Fig 1: http://en.wikipedia.org/wiki/Hockey_stick_controversy
Fig 2: http://en.wikipedia.org/wiki/File:1000_Year_Temperature_Comparison.png

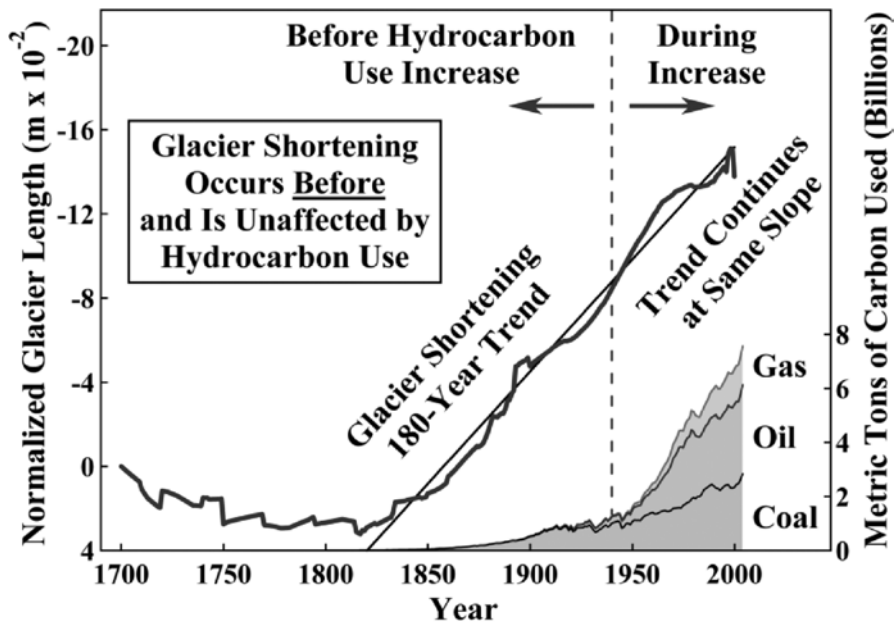


Fig 5: Current cycle of Glacier Melting as Earth Recovers from Little Ice Age began about 1800 and is unaffected by hydrocarbon use. Dr Arthur Robinson, Oregon Institute of Science and Medicine.

Every weather event is presented as evidence for climate change: No matter what happens – floods, drought, heat, cold – it is touted as evidence for global warming. Perhaps the most comical aspect is the way that Warmists claim that even cold weather proves their point. As I write, the UK has been experiencing the coldest winter for 18 years. Transport has been brought to a halt by exceptional snow-falls in much of the country. But as a *Telegraph* headline puts it “Extreme weather proves the effect of global warming”.

Professor Myles Allen of the Climate Dynamics group (read Warmist propaganda group?) at Oxford University intones the mantra: “Even though this is quite a cold winter by recent standards, it is still perfectly consistent with predictions for global warming”. I even saw the Asian Tsunami of Boxing Day 2004 attributed to climate change, though tsunamis are driven by plate tectonics and have nothing to do with climate at all.

“Species are driven to extinction by global warming”

It’s worth recalling that every species alive today survived both the Roman Optimum and the Mediæval Warm Period, when temperatures were warmer than today’s. Many extant species survived the previous interglacial around 120,000 years ago (the “Eemian Interglacial”) when again temperatures were warmer than today’s. Current temperatures are not a problem for species survival – although they may affect the distribution of species.

We can’t afford to be complacent. There is no doubt that a major extinction event is taking place in our times, and that it is largely driven by human activity – but not by climate change. Extinction is driven by human population pressure, habitat destruction, and the clearance of natural forest for agriculture. The bitter irony is that much of the pressure for agricultural land results from the demand for bio-fuels. They are clearing primeval rain forest in Borneo (and threatening the Orang Utan) and the Amazon forests in Brazil, to grow palm oil and sugar cane for bio-ethanol and diesel.

Extinction is driven not by climate change, but (at least in part) by our policies in response to the perceived threat of climate change.

Polar bears: The polar bear is the pin-up species for Warmists. In his disaster movie, Al Gore shows two polar bears drowning, too tired to swim to the receding ice. Oddly, he shows it not as real film but as a cartoon. It would have been difficult to get real film, because polar bears are probably the best and strongest swimmers amongst terrestrial mammals.

Sadly for the Warmists, there is considerable research to show that despite the warming of recent decades, polar bears are doing rather well.¹⁸ Populations have roughly doubled in the last thirty years, while – bitter irony – the bears seem to do best of all in regions affected by some warming. There is also recent fossil evidence to show that the ancestors of polar bears, very like today’s bears, survived the previous Eemian Interglacial (120,000 years ago, and warmer than today) perfectly well.

18 Fred Langan & Tom Leonard Polar bears ‘thriving as the Arctic warms up’ *The Daily Telegraph*, 9th March 2007



“You must be in it for the money”

When all the other arguments run out, the Warmists come back to the accusation that sceptics must be in the pay of the oil industry. Let me publish a disclaimer: I have done a great deal of work on the issue over two years, organised seminars, attended conferences, published leaflets and a DVD, and I have received not a penny for my pains. For the first time ever, I was offered an honorarium of \$1000 for agreeing to speak at the Heartland Manhattan Conference in March 2009. I asked for the money to be paid not to me, but to The Freedom Association, of which I am Honorary Chairman.

It is true that energy companies over the years have paid a few million dollars to think-tanks who take a sceptical view of these issues. But this is dwarfed by the (literally) *billions* of dollars paid by governments and foundations to scientists, research institutes and so on to support The Great Carbon Myth. There is a great gravy train of beneficiaries in the media, in academia, in research institutions and businesses, and now also in local authorities, whose jobs and incomes depend on climate change, and whose funding will be at risk when the bubble bursts.

Even Exxon Mobil, the *bête noire* of the Warmists, now spends far more on “green” activities than it ever contributed to the sceptic cause. Government provides the incentives at tax-payers’ expense, and companies become rent-seekers as (perfectly properly and rationally) they exploit the opportunities offered to them.

The IPCC and “Consensus”

The Intergovernmental Panel on Climate Change (IPCC) was set up in 1998 under the auspices of the World Meteorological Organisation (WMO) and the UN Environment Programme, to present a view on climate change. In 2007 the IPCC shared the Nobel Peace Prize with Al Gore (it was said that Gore was disappointed, as he’d hoped for the Nobel Prize for Science – others thought he deserved the Nobel Prize for Science Fiction. At least the prize money may help to pay the energy bills on Gore’s twenty-room mansion, which consumes more than 20 times the power of an average American home)¹⁹. The 2,500 or so scientists (I use the term loosely) on the IPCC’s panel each received a Nobel lapel pin in honour of the prize.


The IPCC is often touted as “the scientific consensus”. But as we have already seen in the quotation from Sir John Houghton (“*We have to announce disasters or no one will listen to us*”) it represents neither science nor consensus. It is simply promoting the alarmist agenda.

In any case, science does not proceed by consensus. As Michael Crichton (author of Jurassic Park) put it, “*There is no such thing as consensus science. If it’s a consensus, it isn’t science. If it’s science, it isn’t a consensus. Period. The greatest scientists in the world are great precisely because they broke with the consensus.*”

I love the (possibly apocryphal) story of Albert Einstein, which illustrates this point. Arriving in the US shortly after the publication of his General Theory of Relativity, the great man was accosted by a rather aggressive journalist who asked “Mr Einstein, they say a thousand physicists disagree with your theory”. Einstein paused a moment and rubbed his chin, before replying “If I were wrong, *one* would be enough”.

Science in fact proceeds by hypothesis and falsification, not consensus (and I will illustrate later how readily the Great Carbon Myth can be falsified). It is not true that dissenters and sceptics are always right, but it is frequently

19 <http://www.snopes.com/politics/bush/house.asp>



true that paradigm changes start with a minority who successfully over-turn the previous consensus. There was a consensus that the Earth was Flat, until a few eccentrics like Copernicus overturned it. There was a consensus around Creationism until Darwin and Wallace found an alternative theory. And so on.

So, back to the IPCC. Its current Chairman is Dr. Rajendra Pachauri²⁰, who was educated at the Indian Railways Institute of Mechanical Engineering, and began his career in the Diesel Locomotive Works at Varsari. Later he studied Industrial Engineering and Economics in the US, and is now described, not as a railway engineer, but as an economist.


These are all wonderful qualifications, but of limited relevance to climate issues. Climatology? Meteorology? Atmospheric Physics? Nowhere on Dr. Pachauri's CV. Yet he is now touted as the world's leading authority on climate change.

He has been able to contribute in one important area. As a vegetarian, he has proposed we all reduce our carbon footprints (footprint?) by eating less meat. Thank you Rajendra.

The IPCC is not a scientific consensus. It is an advocacy group, linked to one particular view of the world and of climate.

Its 2,500 "scientists" are by no means all climatologists. Indeed some are not scientists at all. Some are economists. Some are avowed green activists. Some seem to lack any qualifications whatever. Nor do they all contribute to the work. They are broken into working groups by section and chapter, and produce drafts which are then subjected to review by other panel members. And here is the rub. The IPCC is notorious for the cavalier way in which it dismisses contrary opinions. It has already seen the light. It knows the truth, and has no time for dissent. Panellists are there to endorse, not to challenge.

20 Biography at http://www.ipcc.ch/pdf/press/briefcv_pachauri.pdf



I have been privileged to work with Emeritus Professor Fred Singer²¹ of the University of Virginia, where he is an atmospheric physicist (so he actually knows what he's talking about when it comes to climate). He says *"The IPCC accepts my corrections to its spelling. But not to its science"*. Fred wears his Nobel lapel pin with proud irony.

At least one IPCC panel member – Paul Reiter PhD of the *Institut Pasteur* for tropical diseases – had to threaten legal action to have his name removed from a chapter with which he profoundly disagreed – the IPCC tried to insist that he was a contributor, even though his strong objections had been ignored.²² The IPCC persisted in asserting that global warming would increase the incidence of malaria in more northerly latitudes, and refused to listen to Reiter's advice that malaria can exist in cool climates. One of the worst ever outbreaks was in Siberia, causing 10,000 deaths in the 1920s. Malaria (ague) was common in Europe until the advent of DDT.

When the IPCC's drafting is complete, the work goes to a steering committee to produce an Executive Summary – which, naturally enough, is all that most politicians and journalists read. The panel is primarily made up of civil servants and bureaucrats, not scientists. It is notorious that the summaries are always much more alarmist than the underlying text. All the "ifs" and "buts" and caveats are removed, and the Executive Summary is sent on its way to feed the media frenzy.

Dr. Roger Cohen has been involved in climate research for many years, and has served on the panel of the IPCC. His insight is instructive:

"I was appalled at how flimsy the case is. I was also appalled at the behaviour of many of those who helped produce the IPCC reports and by many of those who promote it. In particular I am referring to the arrogance; the activities aimed at shutting down debate; the outright fabrications;

21 Founder of the Science and Environmental Policy Project: <http://www.sepp.org/>

22 See <http://www.climateaudit.org/?p=330> for a letter from Dr Reiter to the House of Lords rebuking the idea that malaria is limited by cold weather.

the mindless defence of bogus science, and the politicization of the IPCC process and the science process itself.”²³

Earth’s Climate History

I trust that this section will be a sufficient rebuttal to those who like to describe sceptics as “Climate Change Deniers”. Of course the climate changes. Constantly. And sceptics often speak and write about it. If there is anyone out there who denies climate change, they’re just plain ignorant.


The long term picture: Over the very long term (hundreds of millions of years) the earth’s climate has undergone massive changes, driven by both astronomical factors and by geography and plate tectonics. The radical changes in the positions of continents around the world over very long time-scales caused changes in ocean currents. There have been times when virtually the whole earth has enjoyed tropical temperatures. And although the “Snowball Earth”²⁴ hypothesis has recently been challenged, there have been times when the earth has been much cooler than today, with extensive ice cover and glaciation.

Atmospheric CO₂ levels have varied widely over time. Whilst today’s level of around 385 ppm is high compared to recent times, the level has been ten times as high in the remote past (and the high level of atmospheric CO₂ was not associated with planetary heating – on the contrary it occurred during an Ice Age).

For two and a half million years the Earth has been locked in an Ice Age, the Quaternary Glaciation. And it’s not over yet. This is perhaps counter-intuitive, since normally when we look out of the window we see little ice. However the long-term Ice Age has been punctuated at regular intervals of around 100,000 years by “Interglacials”, periods of typically ten to twelve thousand years of warmer weather.

23 *On the IPCC’s case for Anthropogenic Global Warming*, 6th September 2008. Full text can be found at: http://anhonestclimatedebate.wordpress.com/2008/10/02/on-the-ipccs-case-for-anthropogenic-global-warming/?referer=sphere_related_content/

24 For an in-depth look at this hypothesis, visit: <http://www.snowballearth.org/>



There is still some debate around the reasons for this cyclical pattern, but there is little doubt that astronomical factors are the main drivers. The eccentricity, axial tilt and precession of the Earth (the tendency of the earth to wobble, a bit like a spinning top) give rise to the Milankovitch Cycles, which in turn appear to drive the pattern of glaciation.

The current Interglacial started about ten to twelve thousand years ago. So if the heavens are running on time, we should be looking for the end of the current Interglacial any time now. And glaciation is a serious business. We're talking a mile of ice over Chicago. And maybe Edinburgh.

The medium term: the current interglacial. During the last ten thousand years, a number of interesting things have happened. First, the whole of human civilisation, the first extensive agriculture, the first cities, all occurred in this one single interglacial.

As the ice melted, the sea level rose (and the UK was cut off from the continent as the North Sea and the Channel met at Dover). Over the period the rate of sea level rise has steadily slowed, and (*pace* Gore) continues to do so.

The current interglacial, especially the last five thousand years, has been characterised by a cyclical pattern of warmer and cooler periods. This is very well treated in Prof. Fred Singer's best-selling book *Unstoppable Global Warming – Every 1500 years*²⁵. We had the Holocene Maxima. Then the Roman Optimum (note the value-judgement in the word “optimum” – we all like warm weather). Then the Mediæval Warm period. And now we seem to be moving tentatively into a new 21st Century Optimum.

This is the key insight of this whole paper: The changes we observe today are entirely consistent with well-established long-term natural climate cycles.

25 Fred Singer *Unstoppable Global Warming – Every 1500 years* Rowman & Littlefield, 2006

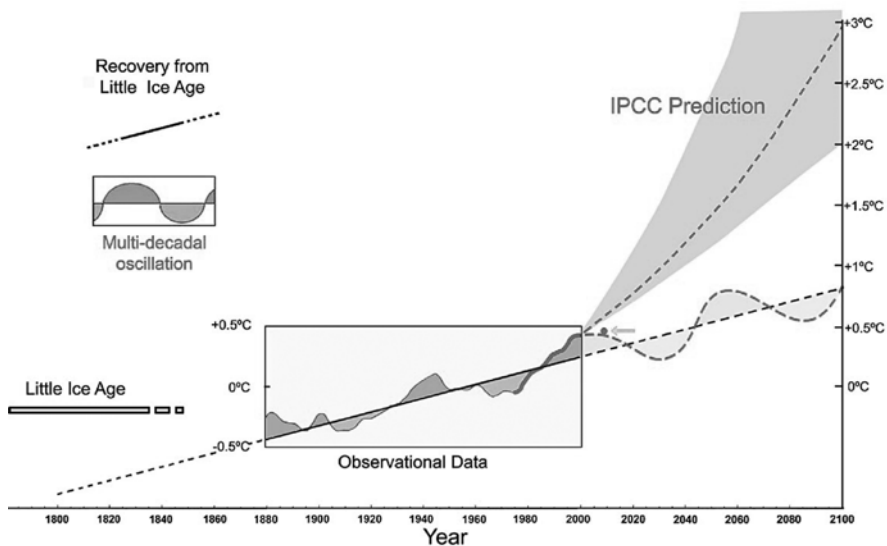



Fig 6: showing how our current temperatures (arrow and dot) are in line with natural climate variability and not the IPCC's predictions.²⁶

We don't need to invoke special pleading or anthropogenic activity to explain our observations. What we see is exactly what we should expect if we have any understanding of climate history.

The short term: We have indeed seen some warming (less than 1°C) over the last 100 years – although it has been slow and intermittent, with temporary reversals. Charles Dickens caught the very tail end of the Little Ice Age, and immortalised his childhood memories of icicles and snow, now reflected on Christmas cards in coaching scenes and fat robins.

There was steady warming in the first half of the 20th Century – at a time when industrial emissions were rather modest. But the situation reversed at the end of the Second World War, and we saw steady *cooling* until the mid-seventies (despite rising levels of atmospheric CO₂). It was in the seventies that the consensus developed that we faced a coming Ice

26 Syun-ichi Akasofu *Two Natural Components of the Recent Climate Change: Recovery from Little Ice Age and Multi-decadal Oscillation*. Mar 09 - awaiting publication.



Age (not unreasonable, considering the expected end of the Interglacial). International news magazines trumpeted the coming Ice Age. I remember buying, and being alarmed by, Professor Fred Hoyle's book *Ice* (I used to have tutorials as a student in Cambridge in the early sixties next door to Fred's office). How easily we get taken in by climate scares!

As recently as 2001, Hoyle's collaborator Professor Chandra Wickramasinghe said: *"Without the greenhouse effect, the Earth would drift into an ice age. It's a minor evil compared with what we are talking about in an ice age. Perhaps, at some time in the not so distant future, if an ice age becomes imminent, we should step up rather than decrease our greenhouse gas emissions."* ²⁷

But from the mid seventies, the cooling trend reversed, and the marked and consistent warming from then until 1998 perhaps provided some excuse for the climate hysteria we now see. But 1998 was a peak. It was the hottest year in recorded history (although in the US the hottest year was in the thirties). Since 1998 mean global temperatures have essentially plateaued, and for the last four years there have been year-on-year declines.

I was in Poznan, Poland, for the IPCC Climate Conference last December (2008) and I well recall stopping by at the Hadley Centre Stand. (The Hadley Centre in the UK is one of the World's most respected meteorological Institutes)²⁸. I asked if I was right that their latest data for 2008 confirmed a continuation of the recent cooling trend, and through gritted teeth they had to admit that it was true. Then they declined to allow me a photograph on their stand, for fear I should misrepresent them!

Of course no one should draw conclusions about long-term climate trends from a run of four years cooling (though it's bitter cold outside as I write, and London is at a standstill with snow – Feb 2009). But it is difficult to square the erratic temperature pattern of the last ten years with the slow, steady, linear increase in atmospheric CO₂ levels.

27 Roger Highfield Study says warming could fend off ice age *The Daily Telegraph*, 21st June 2001

28 website at: <http://www.metoffice.gov.uk/climatechange/science/hadleycentre/>

The science

Let me start with a disclaimer. Although I have a Maths degree from Cambridge, I don't pretend to be a scientist, still less a climatologist or an atmospheric physicist. But like all politicians, I have to make judgements based on other people's research, information and advocacy, and I trust it is clear what judgement I have made on the Great Carbon Myth.


Below I describe in layman's terms the arguments that convince me that AGW is not only unproven, but disproven. But for those who want hard science, I commend the paper produced by Prof. Fred Singer's Group, The Non-Governmental International Panel on Climate Change (NIPCC). His paper makes extensive use of material from successive IPCC reports, but reaches profoundly different conclusions.²⁹

The nature of CO₂: We have already remarked that CO₂ is natural, and that it is essential to life on earth. It contributes to plant growth and agricultural yields. It is practically airborne fertiliser. But it is also, as the Warmists love to tell us, a greenhouse gas (GHG). What they fail to mention is that it is not the most important greenhouse gas. The most significant GHG in the atmosphere is water vapour. And while we may imagine we can control CO₂, there is simply no way in which we can even start to control *water vapour*. As long as the wind blows over the ocean, the atmosphere's main GHG will be entirely beyond our control.

Temperature and CO₂: The Correlation. In his famous disaster movie *An Inconvenient Truth*, Al Gore included a few convenient untruths (more on this later). One of the biggest porkies relates to the supposed relationship, over time, between average global temperatures and atmospheric CO₂ levels.

It is possible to obtain, from ice cores and other sources, some pretty reliable records of these parameters over an extended period – about

²⁹ S. Fred Singer, Nature, Not Human Activity, Rules the Climate, In *Summary for Policymakers*, Heartland Institute, 3rd February 2008. Full text at http://www.heartland.org/custom/semod_policybot/pdf/22835.pdf



650,000 years. Gore shows the two graphs, and overlays one on the other. And Bingo! A perfect match. Proof positive. CO₂ levels drive temperature. QED.


But as Al Gore knew perfectly well (or ought to have known) there is a fundamental flaw in the argument. If you look at the two graphs in higher resolution, you find that while the shapes of the two graphs match uncannily, there is a time lag. The temperature graph precedes the CO₂ graph by around 800 to 1000 years. Any scientist looking at the two graphs would agree that there has to be a causal relationship. But looking at the time lag, our scientist would be forced to conclude that *temperature causes increased levels of atmospheric CO₂* – not *vice versa*. Gore has got the cart before the horse. Far from proving that CO₂ drives temperature, his graphs prove the exact opposite.

And there is a well-understood mechanism to explain this causation. As the world warms, the oceans warm. And as the oceans warm, they give up dissolved CO₂ to the atmosphere. When they cool, they absorb more CO₂ from the atmosphere. In my view, the graphs from Al Gore's movie are sufficient in themselves to disprove the Great Carbon Myth.

And I would be astonished if Gore were not aware of this. It is interesting that sceptics regularly make this point, and so far as I know, the Warmists never try to defend it.

Looking at the last 150 years, it is difficult to make the correlation stick. The level of atmospheric CO₂ has increased at a very steady and consistent rate, while the temperature graph has been intermittent, with a significant and sustained cooling for three decades from 1945, leading to the "Coming Ice Age" scare of the mid-seventies which we have already noted.

Diminishing Returns: Yes, CO₂ is a GHG. It blocks out-going infra-red radiation from passing through the atmosphere and out into space, and so it tends to keep the world warm. But it only blocks a small percentage of the infra-red spectrum. And the key insight here is that this section of the



spectrum is almost totally blocked by the current level of atmospheric CO₂. Further increases in CO₂ will have a minimal effect.

The “climate forcing effect” (“forcing” is the term used to describe the GHG warming effect) of CO₂ is governed by a logarithmic equation that represents a law of diminishing returns. Imagine a world with no CO₂ in the atmosphere. If we introduced say 20ppm of into the atmosphere, it would have a marked warming effect. Introduce a second 20ppm tranche, taking the total to 40ppm, and the second tranche will have a much smaller effect. The third will be smaller again. From the current level of 385ppm, a further 20ppm will have a trivial effect.


Arrhenius in the 19th century was well aware of this relationship, arguing that the warming effect of CO₂ was proportional to the square root of its concentration – which amounts to the same thing.³⁰

Bob Carter is a research professor in the Marine Geophysical Laboratory at James Cook University in Queensland, Australia. He is a geologist specialising in palaeoclimatology, stratigraphy, marine geology, and environmental science, and a former Director of Australia’s Secretariat for the Ocean Drilling Program. For a more detailed and technical treatment of the “Diminishing returns” point, with the equation set out and the outcome in graphical form, see Carter’s excellent paper *Knock, knock: where is the evidence for dangerous human-caused global warming?*³¹

But let me offer you a more homely analogy. Suppose, on a sunny day, you decide to go out into your garden, and to whitewash the outside of your kitchen window. You will perhaps halve the light coming into your kitchen. Apply a second coat, and the light will diminish again, halving with each new coat of whitewash. But by the time you get to (say) the tenth coat, there will be virtually no light getting into the room, and further coats will make little difference. That is where we are with the greenhouse effect of atmospheric CO₂ .

30 http://en.wikipedia.org/wiki/Svante_Arrhenius

31 <http://ideas.repec.org/a/eap/articl/v38y2008i2p177-202.html>



A while ago I had the opportunity to put this point to two IPCC scientists who were visiting the European parliament in Brussels. They agreed about the nature of the relationship between CO₂ and the forcing effect. But they said that there may be positive feed-back mechanisms between CO₂ and other greenhouse gases which would multiply the effect. Indeed there may. But they provided no evidence of these effects, and other scientists believe that the feed-back mechanisms, if they exist at all, may be negative.


The Fingerprint: Many people fail to appreciate the extent to which climate alarmism is based on computer models. Modern computers are extraordinarily powerful, yet as we all know they cannot predict with any certainty whether it is going to rain on your birthday. It seems the height of hubris to imagine that they can predict the climate in a hundred years' time.

Everyone is familiar with the truism of the IT business: “Rubbish in, rubbish out”, and this applies in spades to climate predictions. Some years ago there was a vogue for chaos theory and the “Butterfly Wing Effect”, where it was suggested that the beating of a butterfly’s wing in Tokyo could precipitate a storm in Arkansas next week. That may be an exaggeration, but it is a characteristic of complex weather and climate models that very small changes in initial conditions can result in huge differences in outcomes weeks, or years, later. So the same models with the same software can produce widely varied scenarios depending on the data input.

However virtually all the computer models based on anthropogenic GHG warming agree about one thing, and that is the *pattern* of warming we should expect. GHGs will produce the greatest effect in the upper atmosphere, five to ten kilometres high. And the maximum warming will be in a band around the tropics. This is illustrated in graphical form in the NIPCC document on page 632.

But we can observe the actual distribution of the very modest warming over the last century. We have information from ground stations, from meteorological balloons, and over the last thirty years from satellites. And they all

32 document can be found online at http://www.sepp.org/publications/NIPCC_final.pdf



show a totally different pattern. The warming we observe is predominantly at ground level, and predominantly Northern hemisphere – quite different from the prediction (again, see the NIPCC graph).

Here we have a classic example of the scientific method in action. We have an observation – that the earth has warmed slightly in the last century. We have an hypothesis to explain the observation – that the warming is caused by anthropogenic CO₂. We have a prediction following from the hypothesis – that the warming should have a distinctive pattern, in terms of latitude and altitude. And we have used new observations of the pattern of warming to falsify the prediction. We have thus falsified the hypothesis. We have disproved the Great Carbon Myth.

It is worth noting that while both ground stations and satellites confirm some warming over 1970 to 1998, the satellites show less warming than the ground station data. Two suggestions are offered to explain the discrepancy:

The Urban Heat Island Effect: Cities are warmer than surrounding countryside, with buildings, concrete, tarmac, heating and air-con, vehicles and factories. They tend to be at least a couple of degrees warmer. Many ground stations were put up years ago near cities, and have since been surrounded by suburbia – and urban warming.

Collapse of the Soviet Union: In the chaos following the break-up of the Soviet Union, many meteorology stations in Russia and across Siberia simply ceased to operate, taking out ground stations from cold locations – and increasing the average results for those that remained. Researchers should have compensated for this effect, but it is not entirely clear that they did.

“It woz the Sun wot dun it”

The Sun is the source of most of the earth’s energy. If it were suddenly to turn off, we should all be dead in short order. Yet it is quite extraordinary that the Warmists, and AGW theory, dismiss any possible solar effect in a footnote. They are mistaken. There is abundant evidence that changes in the Sun can affect the earth in a number of ways, both in terms of the direct radiant heat we receive, and the way that clouds form in the upper atmosphere.³³

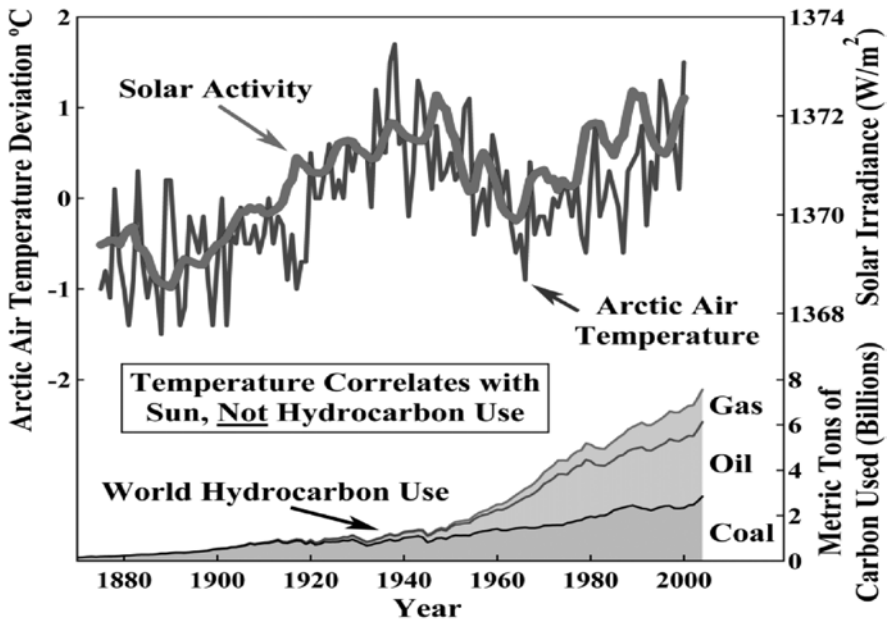



Fig 7: Sunspot activity shows a much better correlation with arctic air temperatures than use of hydrocarbons, suggesting sun activity not CO₂ output drives climatic changes. Dr Arthur Robinson, Oregon Institute of Science and Medicine.

At the start of the 19th Century, Sir William Herschel was the King’s Astronomer, and had distinguished himself by the discovery of the planet Uranus. He was also interested in the Sun/Earth relationship, and wondered

³³ For an excellent, accurate but non-technical discussion of the history of our understanding of the Sun/Earth relationship, and the astronomers who unravelled it, see *The Sun Kings* by Stuart Clark, Princeton University Press



if visible changes in the sun (and especially sunspots) had any effect on the earth's climate. Studying records from 1650 to 1713, he identified five periods when sunspot activity had declined, and he started thinking about possible measures of the earth's climate, so that he could compare the two.

Turning to Adam Smith's 1776 work *The Wealth of Nations*, he discovered records of grain prices over this period. He expected that sun-spots would reduce the sun's heat, resulting in poorer harvests and higher grain prices. To his surprise, he found the exact opposite: sunspot activity was associated with low grain prices, and therefore by implication with warmer weather (again, note the economic benefits of global warming!).


Publishing his results, he was immediately assailed by bien pensant opinion – not least in the *Edinburgh Review*, which fulminated against the absurdity of imagining that sunspots could affect grain prices. Any fool could see that this was nonsense. Herschel must be too clever for his own good.

But in this case, “any fool” was wrong. We can now envisage a clear causal chain between sunspots and grain prices. We now know that sunspots are associated with a strengthening of the sun's magnetic field. This in turn reduces the access of cosmic rays to the inner Solar System, and reduces the flux of cosmic rays in the earth's upper atmosphere. But we know that cosmic rays play a part in cloud formation. Fewer cosmic rays, fewer clouds, more sunshine, higher crop yields, lower grain prices.

The Maunder Minimum:³⁴ Pursuing the same line of work, astronomer Edward Walter Maunder (1851 – 1928) noted that the unusually long period of low sun-spot activity, 1645 to 1715, coincided with the “Little Ice Age”, when bitter winters and cool summers came to Europe (and the world) and when Ice Fairs on the Thames saw whole oxen roasted on the ice.

Other astronomers have now found similar relations in other periods, and the correlation is well-established. And unlike Al Gore's temperature/CO₂

34 Online Science Encyclopaedia entry: <http://science.jrank.org/pages/4184/Maunder-Minimum.html>



correlation, there is little doubt this time over the direction of causality. No one will assume that the price of grain causes sun-spots.


It is worth noting that the currently expected sun-spot cycle is, as I write, failing to materialise, and some solar scientists are now wondering if this presages a new cooling. If the last four years are anything to go by, they could be right. Russian scientists in particular are dismissive of AGW theory and much more inclined to look for a solar explanation. So why did Russia decide to sign up, belatedly, to Kyoto? We'll come to that, but it was about selling CO₂ emissions permits to the West for very large sums of money – not about saving the planet.

Al Gore's movie: Science fiction?

Many people – too many – took Al Gore's disaster movie at face value. We have already looked at several errors: his temperature/CO₂ graphs don't prove his point. They disprove it. His extraordinary graph, where he used a fork-lift to follow an almost vertical graph predicting future temperature rises, is the direct opposite of the real "diminishing returns" equation governing the forcing effect of CO₂.

Al Gore threatens us with a "Tipping Point". Unless we take action within ten years (or five years, or now) we will pass a "Tipping Point" of catastrophic, runaway feedback effects which will leave the world uninhabitable. But we have two counters to that: first, the world has been warmer than today, both in the Roman and Mediæval warm periods, and no such runaway effects were noted. Second, if Gore is right, we're too late to do anything about it. Despite our best efforts, CO₂ emissions will continue to rise for decades (China is building one new coal-fired power station a week, with India not far behind). And it will be many decades after that before atmospheric CO₂ levels start to decline.

In 2007 a concerned parent from Kent, Stewart Dimmock, worried that children were being brainwashed by alarmist propaganda, went to the High Court to seek a ruling on the Al Gore film. The Judge Mr. Justice Burton




said that the film contained “partisan political views”, and that it should not be shown in schools without appropriate guidance notes. He identified nine substantive errors in the film³⁵:

1. Sea Level will not rise by 20 feet
2. Pacific atolls are not being inundated
3. The “Ocean Conveyor” (Gulf Stream) is not shutting down
4. CO₂ levels and rising temperatures are not an “exact fit” (*Author’s note: nor even a good fit!*)
5. Scientists have not established that Mount Kilimanjaro’s snow recession is caused by global warming
6. There is insufficient evidence that global warming caused the drying of Lake Chad
7. Global warming did not cause Hurricane Katrina
8. Polar bears are not drowning because of global warming
9. There is insufficient proof that coral reefs are being bleached by global warming

The sceptics strike back: Given the strength of the Warmist lobby, it must have taken great courage for Channel Four to allow Martin Durkin to make his film *The Great Global Warming Swindle* (TGGWS) which in part was a counter-blast to Gore’s movie. TGGWS was in turn taken to OfCom by the Warmists with a complaint that it was misleading. OfCom found some technical errors in Durkin’s process (for example, not giving interviewees enough time to comment on the finished film) but found no substantive errors of fact. The film was not misleading.

The Warmists tried to use OfCom’s criticism of TGGWS to discredit Durkin. But the fact remains: the High Court found that Gore’s film contained substantial errors of fact; OfCom found that TGGWS did not.

³⁵ Stuart Dimmock v Secretary of State for Education and Skills, 10th October 2007, EWHC 2288. Text can be found at <http://www.bailii.org/ew/cases/EWHC/Admin/2007/2288.html>



In April 2007 I organised a major seminar in the European parliament on the climate issue, where my key-note speaker was Lord Lawson of Blaby. At the end of the day, I showed TGGWS. Many of the audience were bright young researchers working in the parliament, and I was struck by what one of them said as he left the committee room: “I never knew that there was an alternative point of view on global warming”. He does now!

The Stern Report: Deeply flawed, profoundly misleading


In the Feb 2009 issue of “B There!”, the Brussels Airlines in-flight magazine, the politics column by-lined by Brigid Grauman contains the following: *“After the UK’s Stern Report warning of the long-term financial impact of climate change and global warming on the on the world economy, **everyone agrees** (author’s emphasis) that the cost of emission-cutting measures now is peanuts compared to the cost of climate change once it sets in”.*

No they don’t. Not everyone agrees. This is sloppy and ignorant journalism. The Stern Report is an outlier amongst economic analyses of the question. Many economists, including the extremely distinguished William Nordhaus of Yale, take an entirely different view.

Nordhaus estimates the economic costs of a “do nothing”scenario at \$22 trillion (we’re into big numbers here). Al Gore’s recommended climate mitigation programme has been costed at \$34 trillion – and even that would only bring the cost of climate change down to \$12 trillion. So \$34 saves you \$10. Not a good deal at all. See the Appendix at the end of this paper for a wide range of web-sites and other sources that criticise Stern.

In particular, for a powerful and technical rebuttal of Stern, see the excellent paper from World Economics³⁶ that covers both the science (Prof

36 Carter, Byatt et al *The Stern Review: a Dual Critique World Economics* Vol 7, No.4, 2006. Pgs 165 - 232.



Bob Carter and others) and the economics (Prof. David Henderson, Lord Lawson, Ross McKittrick and others).


Bear in mind that most of these economic analyses are based on the assumption that the underlying AGW theory is correct, and that global warming is a real threat. If it is not (as I argue in this paper) then the proposed expenditure on mitigation – many *trillions* of dollars – is simply thrown away, at a time when we can least afford it.

The other argument we hear bandied about, alongside “The cost of inaction exceeds the cost of mitigation”, is this: “Even if you’re right, you can’t be sure, so shouldn’t we take action to mitigate climate change as an insurance policy, just in case?”. An attractive idea, until you note that the insurance premium greatly exceeds the damage against which we’re invited to insure. If you own a £20,000 car, you’re not too keen to pay £30,000 for insurance. Yet that is exactly what we’re asked to do with climate change.

A variant on this argument is “If you don’t think we should limit carbon emissions to save the planet, surely we should do so to increase our energy security?” I return to this point later.

So how did Stern get it so wrong? In at least three ways (or four, if you count his blind acceptance of the AGW scenario). First, he over-estimated the down-side of global warming, accepting severe alarmist scenarios. Then, he ignored the up-sides. Higher atmospheric CO₂ levels increase agricultural yields – something we desperately need as global population grows. Yes, we may lose some agricultural land in tropical areas, but huge new tracts of land will open for agriculture in Northern areas of Russia, Eastern Europe, Siberia, Canada. As we have noted already, climate-related deaths will reduce. We will use more power for air-conditioning in the summer, but far less for heating in the winter.

But his biggest error was the discount rate he used (well-covered in the Wikipedia section on objections to Stern). When we are dealing with costs and benefits in the very long term, we need a realistic discount rate. £100



today is by no means the same thing as £100 in 2059, in fifty years' time. If we use the Stern discount rate of 1%, your £100 is worth £60.50. But if you use a more realistic discount rate (the sort a commercial accountant might use for long-term projects) of say 4%, your £100 is worth only £12.99. That's a factor of more than four times, come 2059.


With the cost/benefit analysis of global warming, you are looking at swingeing costs now, and in the short/medium-term, in exchange for supposed benefits in the very long term. Substitute a realistic discount rate in Stern's analysis, and the result is reversed. Costs exceed benefits.

The UK's own Climate Change Bill comes with an impact assessment³⁷. I checked it out. While both costs and benefits are estimates with a wide margin of error, and the ranges overlap, it is clear that the costs are expected to exceed the benefits. The maximum, the minimum and the mean estimates of cost all exceed the corresponding figures for benefits. I wrote to the Minister asking why the UK was proceeding with a measure that the government's own analysis showed to be such poor value. His muddled answer merely suggested that there might be further benefits they had been unable to account for, which calls into question the whole point of the impact assessment.

Many writers, not least Lord Lawson of Blaby, in his excellent book *An Appeal to Reason*, argue that a much better response to the perceived risk of climate change would be *adaptation* rather than mitigation. The solutions would be local rather than global. They would deal with real problems if and when they arise, in affordable bite-sized lumps, rather than swallowing the alarmist model whole and spending trillions on solutions that may not work, and may not be needed in the first place.

We have already noted the work of Bjørn Lomborg, whose Copenhagen Consensus found that, out of a wide range of policies designed to enhance the human condition, climate mitigation was by far the worst value (and bear in mind that Lomborg is accepting the "consensus" position on global

37 DEFRA, *Impact Assessment of the Climate Change Bill* 5th November 2007. Full text at: <http://www.defra.gov.uk/ENVIRONMENT/climatechange/uk/legislation/pdf/cc-impact-assessment-final.pdf>



warming). I heard him speak at a Convention in Chicago in 2008, and he put Lawson's point in his own very graphic words.


“No one is going to stand on the beach in the Maldives for a hundred years and watch as the sea level slowly rises around their ankles. They will do something about it. They may build sea defences, or find ways to raise their buildings. In the worst case they will relocate to another country. In each of these cases the cost of their responses will be trivial compared to the costs of mitigation.”

Meantime there is no evidence of the sea level rising around the Maldives, and people continue to invest in beach-side hotels. Yet we have the unedifying sight of the leaders of poor and low-lying countries demanding “compensation” from developed countries for speculative “global warming” problems that may never happen.

Another point that Lomborg makes is that the best estimates of the effect of the Kyoto protocol are that it may reduce mean global temperatures by 0.2°C by 2100 – almost too little to measure. Put it another way: temperature will still be on a rising curve (on the alarmist scenario) and we will simply have delayed by five years or so the mean global temperature we would have reached by 2100.

(Another good line from Lomborg: he quoted an estimate – I don't know the source – that if we do all that Al Gore asks us to do, we may save the life of one polar bear per year, in fifty years' time. But, adds Lomborg, we currently shoot three or four hundred polar bears a year. So we could achieve the same benefit for the polar bears, and save ourselves squillions of dollars, by simply shooting one less).

Lord Lawson (a former Chancellor of the Exchequer) argues that the worst effects of the alarmist scenario would be that in fifty years time, our descendants would be 10% worse off than they might otherwise have been. But it is a realistic guess that in fifty years time (despite the current recession) our descendants will be at least twice as rich and prosperous as we are today. So we are being invited today to make vast sacrifices for



speculative benefits, in the hope that our great-grandchildren will be 100% better off than us, rather than only 80% better off than us. Put that way, mitigation is lunacy.

Next time you hear someone parrot the line that the costs of inaction exceed the costs of mitigation, please tell them they're wrong.

Flawed Policies for Climate Mitigation


Even if you accept the Warmist scenario, even if you believe that reducing CO₂ can save the planet, the policies currently in place are simply not working.

It seems that everyone, and especially the BBC, believes that the USA is the world's biggest polluter (although today it's probably China). They believe that the US is profligate and careless and a block to finding a solution to the climate conundrum. Why do they believe this? Because, they say, Europe signed up to the Kyoto protocol, while in the US, George Bush failed to sign. But George Bush never had an opportunity to sign Kyoto. In fact Bill Clinton signed Kyoto, but never sent it to the US Senate for ratification, knowing that it would never pass. Bush did not submit it for ratification, but he could not have secured ratification either.

Yet in recent years the US trend on emissions has been better than that of the EU. While the US was until recently the world's largest single emitter in absolute terms, that was simply a function of having the world's largest economy. Looked at in terms of emissions per unit of production, the US is very much in the same ball-park as the EU.

For some years the EU has been pursuing a policy of emissions trading – the EU Emissions Trading Scheme (ETS). This scheme has been analysed in detail in two very thorough and well-researched reports by the think-tank Open Europe³⁸. Their findings, very briefly, are that:

38 Hugo Robinson & Neil O'Brien *Europe's Dirty Secret: Why the EU Emissions Trading Scheme isn't working*. Open Europe, August 2007.
Open Europe Staff: *The high price of hot air: Why the EU Emissions Trading Scheme is an environmental and economic failure* Open Europe, 7th January 2006

- 
1. The ETS has done little to help achieve emissions targets
 2. It has added a new layer of costs and bureaucracy to business
 3. It has had perverse effects and unintended consequences, introducing vast distortions into the energy market
 4. It has created new, non-productive opportunities for rent-seekers to move in and profit from the trading process

Open Europe estimates that the EU's current Climate and Energy Package will cost the UK £9 billion a year.


The ETS, coupled with the EU's piecemeal approach to renewables, is skewing the market, creating distortions between different renewable technologies, and it will undoubtedly stifle innovation. Worst of all, the EU's policies massively discriminate against one carbon-free generating technology – nuclear – and in favour of ineffective technologies like wind.

A recent *Der Spiegel* report³⁹ says that an unintended consequence of ETS is that wind power has the perverse effect of reducing the price of carbon emissions permits in the market – fewer are needed so the price goes down, allowing more fossil fuels to be used. ETS ensures that the more emissions are “saved” by wind power, the easier it becomes to burn fossil fuels.

As a conservative, I hate new taxes, and I oppose new taxes. However I believe that if you really want to reduce emissions (and perhaps if you merely want to reduce dependence on imported fossil fuels – a much more worthwhile goal) then a carbon tax would be a better deal than ETS (or Cap'n'Trade, as it is known in other parts of the world). A carbon tax would be fair, and transparent, and predictable, and inclusive, and would not stifle innovation by discriminating between different low-carbon technologies.

I am sometimes challenged by those who argue that conservatives should be pro-market, and that ETS is a market-based system. And I do believe

39 Anselm Waldermann Wind Turbines in Europe do nothing for emissions-reduction goals *Spiegel Online*, 10th Feb 2009




in real markets, but this is not a real market, as we saw when the price for emissions permits collapsed effectively to zero. Real markets deal in commodities with a real, underlying value. Emissions permits are a bureaucratic construct with no real value, and are wholly vulnerable to changes in regulation.

So what happened under ETS? Initial emissions allocations were made by governments. Some governments (like France and Germany) were generous, while others like the UK, seeking to play the game (cricket has a lot to answer for!) were less so. As a result, for several years British companies transferred around £½ billion each year to continental companies, to buy permits – with no effect at all on emissions. Within the UK, Hospital Trusts transferred millions of pounds to big oil companies – hardly the effect the designers of the scheme intended.

Major CO₂ emitters, for example cement companies, were given free allocations of carbon permits. This creates a massive barrier to entry for new companies in these industries, stifling competition and innovation. Now, with the world in recession, companies which have had to reduce production find they have a side-line in selling permits they no longer need. This creates in effect a subsidy for reduced production levels, encouraging producers to restrict production while maintaining maximum pricing levels.

The Clean Development Mechanism (CDM): This is effectively ETS on an international scale. Can't buy your permits in the EU? Just fine. You can buy them from China, or Africa, or Russia. Now we see why Russia caved in and signed Kyoto: not to save the planet, but because with the closure of Soviet-era smoke-belching plants, they had a gold-mine of carbon credits to sell to the gullible West.

EU bureaucrats like to talk about “additionality” – the concept that the projects generating the credits in third countries must be things that would not have occurred otherwise. But how do you tell? Additionality suffers from the same problem as hypothecated taxes. You have to compare what you do with what would have happened otherwise. But that is entirely



speculative. You will simply never know whether the project would have happened otherwise, or not.

Several reports, not least an unusually thorough documentary from the BBC, have shown how money is transferred to non-EU countries in respect of projects that would have happened anyway, or which have not happened at all. In at least one reported case, a bent entrepreneur set up an intensely polluting operation because the CDM payments he received for closing it greatly exceeded the cost of setting it up⁴⁰.


So how can we police such a system? We can't. The sort of certificates and assurances we should get are worth no more than a health and safety certificate with a bottle of Chinese baby-milk. We are, in fact, opening our wallets to sharp operators in third-world countries and inviting them to take our money. The beneficiaries cannot believe our folly, or their luck.

It is tragic that just as we see the abject failure of ETS and CDM, President Obama in the US is proposing to go down the Cap'n'Trade route.

The global challenge: Many Warmists are in ecstasies over what they see as President Obama's new commitment to climate mitigation and emissions control. But it was notable that in his first major policy speech following the inauguration, he prefaced his remarks on climate with calls for US energy security, appearing (rightly, in my view) to set a higher priority on energy security and energy costs than on climate issues.

We need to come to terms with the harsh global reality: even if we could control climate by reducing emissions (which we cannot); even if the European proposals for emissions reductions were workable (which they are not); even if the mechanisms proposed would work (which they will not) no such plan could succeed unless it engaged all the world's major economies including Russia, India and China. China is building a new coal-fired power station every week. India is not far behind. Russian scientists and policy-makers are disinclined to buy the Great Carbon Myth. The chances of a truly global policy on emissions are close to zero, at

40 Mark Gregory *The great carbon bazaar* BBC News Online, 4th June 2008



least until the coal and oil run out, or until nuclear fusion delivers on its much-delayed promise.

In the small print of President Obama's commitment to climate is exactly the same proviso that applied under the Bush administration: that the US will not cut emissions and damage its economy unilaterally, and will only engage fully in climate mitigation as part of a global programme. Even if Obama were prepared to set aside that condition, the Congress will not, and the condition will never be met.

Energy security: the major challenge


Here in the UK, we are just starting to realise that we face a potential energy crisis which requires massive policy changes, fast, if we are to avoid a partial shut-down of the UK economy by the middle of the next decade – say 2015. A series of reports has pointed out the problem, not least the one by Emeritus Prof Ian Fells of Newcastle University⁴¹, Professor of Energy Conversion and an expert on renewables.

Three factors are coming together at the same time to create the crisis. Firstly, our Labour government has failed to address the electricity generation issue for eleven years. They should have been building new capacity steadily, as older power stations approach their end-of-life.

Secondly, the EU's renewable energy plans require the UK to produce 15% of its energy from renewables by 2020. This will mean close to 40% renewables from the electricity generating sector, and the government is planning to get most of this from wind. Its plans for new wind capacity within ten years are heroic, not to say fanciful. There is simply not the capacity in the industry to build, install and connect the capacity we need in the time-scale.

We already have one off-shore wind-farm at Blyth, Northumberland that produced no power for nearly three years because the connector broke and

41 Ian Fells *UK Energy Policy: some paradoxes and anomalies* Fells Associates, April 2001



they had great difficulty reconnecting it, while major off-shore wind projects are being abandoned as developers get cold feet (and the “green jobs” we were promised fade way).⁴²

Even if the wind capacity were built, the national grid cannot be balanced with such a high proportion of unpredictable and randomly intermittent power. Apologists for the wind industry argue that although the wind may fail to blow in one part of the country, it will be windy elsewhere, so we should get a balanced national supply. They seem to have missed three points.


Firstly, it is by no means uncommon to have a high pressure area over Britain for an extended period, so no wind power at all (as happened in the recent January 2009 cold snap – just when we had most need for the power). Secondly, they’ve forgotten the losses in transmission. The pathetic, intermittent trickle of electricity delivered by wind-farms doesn’t lend itself to long-distance high-voltage transmission.

The government’s reliance on wind-power is a disaster in the making, especially if they believe their own forecasts and fail to build adequate conventional capacity.

And the third factor in the perfect storm threatening our energy security is the EU’s Large Combustion Plant Directive⁴³. This will require at least half a dozen major UK coal-fired power stations to close by 2015. We will lose perfectly good power stations that could run for years, but which fall foul of the EU’s draconian emissions controls. I am very much hoping that a future Conservative Energy Minister will simply refuse to recognise the EU edict, and carry on regardless – but it will have to be soon, because I am told that these power stations will be run down as 2015 approaches, and it may be difficult then to wind them up again.

42 http://news.bbc.co.uk/2/hi/uk_news/england/tyne/7829161.stm

43 Full text at http://eur-lex.europa.eu/LexUriServ/site/en/oj/2001/l_309/l_30920011127en00010021.pdf



Without radical changes to energy policy, Britain will face a disastrous energy supply position by the middle of the next decade, with power cuts, rolling blackouts and three-day weeks – perhaps for an extended period.

Warmists are touting clean, green renewable energy as the answer to all our problems. They've got it wrong. There is certainly a place for renewables as we seek to reduce increase our energy security, and to reduce our dependence on imported fossil fuels. But renewables are the icing on the cake – not the cake itself. Or as Professor Fells puts it: *“Any notion that renewables can provide for all our requirements is a mischievous and reckless boast that will leave us in the dark”*.⁴⁴


I want to stress that many renewable technologies, and other alternative approaches to energy generation, must be pursued. Hydro-electric has been in use for centuries. Solar offers promise if and when the technology allows cost reductions. Bio-mass has great potential. We should be doing more with distributed generation, combined heat-and-power, and waste incineration for energy recovery. Recently the National Grid has been talking about the production of methane from biodegradable household waste, which seems a good deal if the economics work out.

But I have serious reservations about two renewable technologies: bio-fuels and wind.

Biofuels require extensive energy inputs to grow and process them, and some estimates of their carbon savings are very low indeed. There is no doubt that tropical forest is being cleared for bio-fuels in Indonesia and elsewhere, almost certainly doing more harm than good. Burning food crops seems ill-advised at a time when human populations continue to grow, and food prices are volatile. And *Der Spiegel* has recently published credible reports of slave labour and appalling working conditions in Brazilian sugar-cane plantations⁴⁵.

44 Ian Fells, We need an expensive miracle, *The Guardian*, 18th September 2008.

45 Clemens Höges, The high price of clean, cheap ethanol, *Spiegel Online*, 22nd January 2009



I believe that renewable energy technologies need to pass the twin tests of economic and environmental sustainability. Wind fails on both counts. I have discussed some of the practical problems of over-reliance on wind earlier. But there's more.


Much of the windiest country in the UK is in the uplands of Wales and Scotland, in line for West winds from the Atlantic. And much of this is peat-land. It is questionable whether wind turbines provide a net reduction in carbon emissions in any location, given the embedded energy in their construction, transportation, erection and infrastructure. But there is no doubt that in peat-lands, the carbon released by displacing peat from foundations, cable trenches and service roads will never be recovered. Wind farms are gesture politics pure and simple⁴⁶. They are there to salve the consciences of the chattering classes – not to deliver carbon-free energy. As the Renewable Energy Foundation⁴⁷ puts it, we must remember that wind turbines are garden ornaments, not power stations.

Close to dwellings, wind farms are a terrible imposition. The visual intrusion in beautiful landscapes is not the half of it. They devalue properties, they blight homes and lives and communities. There are well-documented and very adverse health effects among susceptible people, from the penetrating infra-sound they produce. In my view we should not allow new turbines within two miles of established dwellings.

I often have members of the public urging me to support wind because “it’s free”. But so are coal and oil and gas “free”. They are just lying there in the ground waiting for someone to take them. Unfortunately, getting the fuel out of the ground and converting it to useful energy costs money, just as converting wind to electricity costs money. And coal and oil work out cheaper than wind. According to a recent House of Commons report, *Wind Power in the UK*, with its hidden subsidy system of “Renewable Obligation Certificates”, is already adding 14% to domestic electricity bills.

46 http://news.bbc.co.uk/2/hi/uk_news/england/tyne/7829161.stm

47 www.ref.org



Nuclear energy: the mainstream, base-load carbon-free energy source

It is extraordinary to me that in their passion to reduce CO₂ emissions, the Greens don't embrace nuclear (although the primæval *über*-Green, James Lovelock of the Gaia hypothesis, has finally and reluctantly endorsed nuclear⁴⁸, and recently four other leading Green campaigners have followed suit⁴⁹). None of the arguments advanced against nuclear makes any sense:

Safety: Sadly some people can't hear the word "nuclear" without adding the word "bomb". But the fact is that only around 100 people have died in the nuclear industry, most at Chernobyl – an ageing, poorly maintained 1950s Soviet nuclear plant, which can no more be compared to a modern nuclear plant than an East German Trabant can be compared to a 21st century BMW. In 2005, nearly twenty years after the Chernobyl accident, the WHO estimated that some thousands of people may eventually die of cancers caused by radiation (mostly thyroid cancer, which has a very high survival rate). But after two decades, only fifty had actually died⁵⁰.


And tragic though those deaths and cancers may be, they pale beside the hundreds of thousands (yes, literally) who have died in coal extraction, or in the hydro industry. Nuclear is the safest mainstream base-load generating technology that we have.

Nuclear waste: As my European parliament colleague Alejo Vidal-Quadras MEP has said "*Nuclear Waste is simply a technical problem which has been solved*". I myself have stood 1000 feet below the granite at the Olkiluoto plant in Finland (with Alejo) and seen the waste storage arrangements. The deep silos are proof against even the worst stress the engineers can imagine – a new Ice Age with a mile of ice over the site.

48 James Lovelock, Nuclear power is the only green solution, *The Independent*, 24th May 2004.

49 Louise Gray, Environmentalists change minds over nuclear, *The Daily Telegraph*, 23rd February 2009.

50 <http://www.who.int/mediacentre/news/releases/2005/pr38/en/>



Commercial viability: Again, the Olkiluoto site provides an example. Privately owned by a consortium of major energy-intensive companies in paper, metals and so on, it is delivering power at much less than conventional prices, and that's after the costs of waste and eventual decommissioning have been provided for. I often hear politicians say grudgingly "Well perhaps we have to have nuclear, but not a penny of public subsidy". Bravo, say I. I just wish they would apply the same criterion to wind farms.

"Uranium is imported just like oil and gas": Yes it is, but uranium represents only around 5% of the cost of nuclear power, while gas represents around 60% of the cost of gas-fired power. And while much of our gas and oil comes from politically unstable areas, much of our uranium comes from Australia and Canada. I know whom I'd rather trust.

Epilogue: Where do we go from here?

In some areas, rational concerns about energy security and cost lead to policies that would also be attractive to Warmists. We should certainly pursue renewables where they make sense. We should pursue local energy opportunities like waste incineration for energy recovery. And we should build more nuclear power stations (which the Greens should applaud if they were half-way rational).

In other areas, the energy-security agenda parts company with the Warmists, and nowhere more so than with coal. Britain is an island built on coal. It's time to start digging again. And I have explained already why I would extract sulphur dioxide from the emissions, but not CO₂.

The back-bone of Britain's energy security policy has to be nuclear and coal. And the sooner the better, or the lights will go out.

http://www.rasmussenreports.com/public_content/politics/issues2/articles/44_say_global_warming_due_to_planetary_trends_not_people

Further Reading

Comment on the Stern report and climate economics:

BBC Radio Four: <http://www.bbc.co.uk/radio4/theinvestigation/pip/cjkmk/>

BBC News: <http://news.bbc.co.uk/2/hi/science/nature/6295021.stm>

Comments on the Stern Review's Economics of Climate Change,
Sir Partha Dasgupta, Professor of Economics at Cambridge University:
<http://www.econ.cam.ac.uk/faculty/dasgupta/STERN.pdf>

Tol on Nordhaus on Stern, Richard S.J. Tol, Economic and Social
Research Institute: [http://sciencepolicy.colorado.edu/prometheus/
archives/climate_change/000997tol_on_nordhaus_on_s.html](http://sciencepolicy.colorado.edu/prometheus/archives/climate_change/000997tol_on_nordhaus_on_s.html)

The Stern Review: A Dual Critique, Various authors:
<http://www.staff.livjm.ac.uk/spsbpeis/WE-STERN.pdf>

The Stern Review of the Economics of Climate Change: A Comment,
Richard S.J. Tol, Economic and Social Research Institute:
<http://www.fnu.zmaw.de/fileadmin/fnu-files/reports/sternreview.pdf>

The Stern Review on the Economics of Climate Change, William
Nordhaus: http://nordhaus.econ.yale.edu/stern_050307.pdf

Wikipedia entry: [http://en.wikipedia.org/wiki/Stern_
Review#Unfavorable_critical_response](http://en.wikipedia.org/wiki/Stern_Review#Unfavorable_critical_response)



General websites:

An Honest Climate Debate: Exposing the truth about the Man-Made Climate Change theory: <http://anhonestclimatedebate.wordpress.com/>

Climate Audit, Steve McIntyre: <http://www.climateaudit.org/>

Global Vision: <http://www.global-vision.net/>

Renewable Energy Foundation: <http://www.ref.org.uk/>

Science & Environmental Policy Project: <http://www.sepp.org/>

Watts Up With That: <http://wattsupwiththat.com/>

The Heartland Institute: <http://www.heartland.org>

A paper looking at whether the USA should sign up to Kyoto: http://al.odu.edu/gpis/ITJ/kyoto_protocols_Jim_Maness_Final_11_.pdf

SPPI (Science and Public Policy Institute): <http://scienceandpublicpolicy.org/>

Recommended books:

An Appeal to Reason, Lord Nigel Lawson, Duckworth Overlook, 2008

Red Hot Lies, Christopher C Horner, Regency, 2008

The Politically Incorrect Guide to Climate Change, Christopher C Horner, Regency Publishing, 2007

Blue Planet in Green Shackles, Vaclav Klaus, Competitive Enterprise Institute, 2008

The Sun Kings by Stuart Clark, Princeton University Press

Unstoppable Global Warming - Every 1500 Years, Fred Singer & Dennis Avery, Rowman & Littlefield, 2008

The Sky's Not Falling: Why It's Ok to Chill About Global Warming Holly Fretwell, World Ahead Publishing, 2007 [aimed at children 8 and up]

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The Bruges Group is an independent all-party think tank. Set up in February 1989, its aim was to promote the idea of a less centralised European structure than that emerging in Brussels. Its inspiration was Margaret Thatcher's Bruges speech in September 1988, in which she remarked that "We have not successfully rolled back the frontiers of the state in Britain, only to see them re-imposed at a European level...". The Bruges Group has had a major effect on public opinion and forged links with Members of Parliament as well as with similarly minded groups in other countries. The Bruges Group spearheads the intellectual battle against the notion of "ever-closer Union" in Europe. Through its ground-breaking publications and wide-ranging discussions it will continue its fight against further integration and, above all, against British involvement in a single European state.

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