Conference on the science and economics of climate change
Sponsored by the Howard Foundation

Summary

This conference was organised by Alan Howard who made his fortune with the Cambridge Diet in the 1980s and endowed Downing College to build a new conference facility, where the event was held. He met with Phil Jones for dinner in January and asked him to participate. Andy Watson and John Mitchell (passed on from Julia Slingo) were approached subsequently. It was the scope of the event was initially unclear. However the Met Office sort clarification and suggested some changes to balance the programme which Alan was happy to agree to.

A mixture of mainstream and alternative views were represented in the speakers and the audience. The agenda and speaker list is in annex A. Christopher Monkton, Andrew Montford (Bishop Hill blog and Hockey stick illusion book), Benny Peiser (Global Warming Policy Foundation), Graham Stringer (MP), Gwyn Prins, Bob Ward, John Pyle and various other Cambridge academics (including Emily Shukburgh) were amongst those in the audience.

Media representation included David Rose (Mail on Sunday), James Delingpole (Sunday Telegraph), Wall Street Journal, Jonathan Leake (Sunday Times), press office staff from the University of East Anglia (UEA) and the Met Office.

There was some discussion but it was limited by speakers over running and discussants putting their own separate points. Alternative views were prevalent in the questioning; in particular highlighting the recent slow down in warming, size of climate sensitivity and Met Office predictions. Robust responses were given, in particular from Mike Lockwood and Hans Graf in support of the Met Office. Key points are outlined in Annex B.

Media coverage – James Delingpole and Andrew Montford wrote blogs. Jonathan Leake wrote a straight science article about reductions in oxygen mirroring increasing CO2 using results from UEA. Not sure about David Rose. I agreed to send David the Evidence brochure. Emily Shukburgh (with Andy Watson) agreed to write something for the Bishop Hill blog.

Vicky Pope
15th May 2011

Annex A - Agenda and speaker list

Objectives: To promote discussion of current topics relating to Climate Change and advance understanding and implications of those issues.

Venue: Howard Theatre, Downing College, Cambridge, UK

Date: 10th May 2011

Programme:

09.25 Alan Howard opens the Conference

09.30 Philip Jones : The Measurement of Global Temperature

10.0 Andrew Watson : Effects of Carbon Dioxide on Climate

1030 Discussion : Led by Alan Howard

11.00 Coffee Break

11.30 Michael Lockwood: Cold winters in Europe could continue

12.00 Henrik Svensmark: Solar activity and Climate Change

12.30 Discussion; Led by Hans-F Graf

13.00 Lunch Break

14.00 Nils-Axel Morner :Are Sea Levels rising ?

14.30 Ian Plimer: Global Warming :The Missing Science

15.00 John Mitchell : Anthropogenic Climate Change

15.30 Discussion : Led by Eric Wolff

16.00 Tea Break

16.30 Vaclav Klaus : The Economics of Climate Change Policies

17.00 Nigel Lawson: A Cool Look at Global Warming

17.30 Discussion: Led by Michael Grubb

18.00 - 19.00 Champagne Reception

Annex B - Key points

Alan Howard stressed that this was a science conference, and that anyone who mentioned climate gate would be thrown out. In his summary he expressed views on the science taken directly from the Global Warming Policy Foundation (GWPF) statements in particular slow down of temperatures and Roy Spencer's work on low climate sensitivity.

Phil Jones talked about some of the details needed to analyse the data, focusing on homogeneity and redundancy in data points (only 100 – 200 points for global coverage). Tony Kelly was concerned that sea surface temperature & land air temperature are not equivalent, and that there is only limited night marine data. Monkton asked about 50 year periodicity. Would taking out Pacific decadal oscillation make a difference? (PJ responded with 'no as it is small').

Andy Watson gave evidence of anthropogenic C02 and its impact. He pointed out that previous rapid global change has 10,000 year timescale. There have been rapid regional changes (e.g. Greenland cooling, Southern hemisphere warming). Mike Kelly said there was agreement on CO2 and radiative transfer, disagreement on water vapour and cloud feedback. He stated that there has been no change in water vapour in the last 50 years (not disputed by Andy Watson despite data that shows otherwise e.g. page 6 of the Met Office Evidence brochure prepared for COP 16). David Rose quoted Ed Milliband 'science is settled' and asked is that right?

Mike Lockwood gave a summary of solar effects, showing the impact on European climate, with only small global impact. He highlighted the Shapiro paper, with 6 times greater solar modulation of UV although long term drift is small (this is the work that Adam Scaife has used in his modelling of the effects). The Maunder minimum had a big impact on European climate but less elsewhere. There is an 8% chance that we could have another Maunder minimum in the next 40 years. The impact of cosmic rays is only important in maritime air, and the effect is slow. Does it matter on long timescales?

Henrik Svensmark showed a correlation between low cloud cover (ISCCP[1]) and cosmic rays from 1985 and discussed the mechanism for a climate effect. He suggested that he could explain changes in ocean heat content by cosmic ray effect and rapid regime shift in 1977. Andy Watson questioned this. Hans Graf showed impacts of different El Nino types on European climate. The recent type is consistent with cold winters in Europe. Models over-predict this type of El Nino now and therefore might underestimate extreme events in future. He stated that more computer power is needed to get the processes right.

Nils-Axel Morner showed lots of tide gauge data with no apparent trend. He then showed a global dataset that did include a trend but said it was wrong and then tilted the graph so that there was no trend. His explanation for this was unclear. He also said that the maximum possible sea level rise was 1m per century. David Vaughan said 2.5-4m was possible, and stressed that open ocean data should be used which gives 3.5mm per year consistent with thermal expansion and measured loss of mass from glaciers and Greenland.

Ian Plimer spent much of his talk emphasising the CO2 produced from volcanoes above and below the ocean and other seismic activity. He also said that the ocean was a natural buffer (so ocean acidification was not a problem), and that CO2 cycles through the system very

[1] International Satellite Cloud Climatology Project

quickly. He asked why 3% CO2 production from man should drive climate change, and said that more CO2 was a good thing (e.g. for growing plants). He also said that the cacophony around climate change has damaged science; it was similar to creationists ignoring time, and based on belief. Andy Watson challenged his statements: CO2 from volcanic sources is very small.

John Mitchell attempted to address some of the issues raised during the day, including the basic greenhouse effect, natural versus man-made variations, detection and attribution. He pointed out that low cloud data is inconsistent with cosmic ray theory.

Eric Wolfe summarised the key points from the day as he saw them and gave a long list of what he thought the audience agreed on - CO2 is a greenhouse gas, the planet is warmer because of C02 and water vapour, adding more C02 should add warming, C02 has risen in the last 200 years substantially. This was vigorously challenged by Vaclav Klaus later but not really during the discussion. The disagreement is on why it has warmed, the scale of climate sensitivity (someone suggested less than 1 deg), the lack of warming in the last 10 years, the impact of the sun and sea level rise. Tony Kelly said observational evidence of warming is very weak. Jonathan Leake asked if Ian Plimer really meant that increasing CO2 was a good thing. Ian said that CO2 was much higher during ice ages. Andy Watson said there was no evidence (that cited was based on models which assumed CO2 amounts during ice ages).

Vaclav Klaus talked about a global warming doctrine. He said belief in the models, high climate sensitivity, impact on ecosystems led environmentalists to lobby for a decrease in emissions and economic decline. He was fundamentally against the outcome which he sees as directives from global governments which undermine democracy and economic development – communism used directives and this doesn't work. He also said economic models were superior to climate models, disagrees with a low discount rate. He said that the arrogance of alarmists aims to suppress the market and control society. Michael Kelly commented that models should be better constrained by physics. David Vaughn said scientists don't have a consensus on policy outcomes. Mike Lockwood said politicians shouldn't tell scientists their job. Nils Morner said that IPCC shouldn't tell us what to think.

Nigel Lawson said that debate is stifled. That is why he started the GWPF. He accepts that CO2 has increased and is likely to warm. There is a great deal of uncertainty in climate sensitivity, cloud effects, cosmic rays. There is a monopoly of IPCC and politicians are led to believe that theirs is the only view. The Interacademy Council and IPCC play down the beneficial effects of CO2 and cherry pick results. Insurance costs more than the risks. There will be fewer deaths from cold, food production will increase up to 3 deg. David King sold a crazy policy to Tony Blair. There is far too much of scientists formulating policy. Developing countries, China and India need cheap energy – anything else profoundly immoral. New technology including shale gas has transformed energy supply. There are no energy security issues. Green jobs are economic illiteracy. The Climate Change Act is absolute madness and should be suspended until there is global agreement i.e. forever.

Michael Grubb said we should separate science and economics. The industrialised world has got substantially richer but emissions have been stable. All energy futures involve considerable investment and this could be high or low carbon. e.g. conventional fossil fuel resource is nearing an end (and would give 1 trillion tonnes of cumulative CO2). Jonathan Leake asked where GWPF got their funding, was it from anyone with an interest in the energy industry? Nigel Lawson said not the energy industry but wanted to protect donors'

anonymity. Brian Carey (Wall Street Journal) asked who gets to decide what route we take on energy futures? Michael Grubb said that a collective institution is required. Great majority of directed economic interest is currently carbon intensive.

Annex C - Speaker details

Professor Philip Jones , University of East Anglia , Director of the Climate Research Unit , specialises in the measurement of global temperature.
Professor Andrew Watson ,FRS University of East Anglia , School of Environmental Science,specialises on the global control of carbon dioxide
Professor John Mitchell, FRS, The Met Office, has 30 years experience of research on climate change, and was chief scientist at the Met Office .He is currently an advisor to the Chief Scientist on climate change.
Professor Michael Lockwood FRS University of Reading is at the Department of Meteorology and has published recently on the influence of the sun's activity on local climate with special reference to European cold winters
Professor Henrik Svensmark , the Danish National Space Centre. is head of the Centre for Sun-Climate research and has popularised a theory that linked galactic cosmic rays with Climate Change.
Professor Nils-Axel Morner ,University of Stockholm, formerly head of the Department of Paleogeophysics and Geodynamics is a global sea-level
specialist .
Professor Ian Plimer,University of Adelaide,of the School of Earth and Environmental Sciences,is a well known Australian geologist.
Dr Vaclav Klaus, President of the Czech Republic is an economist , formerly Prime Minister and Minister of Finance, and has a special interest in climate change isuues.
Lord Nigel Lawson was Chancellor of the Exchequer in Margaret Thatcher's government and is Chairman of The Global Warming Policy Foundation, a think-tank dealing with policy issues associated with global warming.
DISCUSSANTS
Professor Alan Howard is a biochemist and organiser of the Conference.
Professor Hans-F Graf is at the Dept of Geography Cambridge.
Professor Eric Wolff is Project Leader at the Cambridge Antarctic Survey
Professor Michael Grubb is an economist on the Climate Change Committee,