

The President

Geological Society of London

Dear President

We are writing as a group of concerned primarily geoscientists, half of whom are or were Fellows, (names and affiliations listed below). Our concern is that the Society's position on Climate Change (aka Anthropogenic Global Warming or AGW), is outdated and one-sided, and is distracting attention and funding from real issues of pollution such as plastic and other noxious industrial and domestic waste. To address this, we proposed to Colin Summerhayes that the 2010 and 2013 GSL Position Papers be posted on the Energy Matters blog, so that all sides of the discussion could be aired; and we are very grateful to Colin for effecting and taking part in this (<http://euanmearns.com/the-geological-society-of-londons-statement-on-climate-change/>). In addition, Colin continues to engage in an open and spirited email correspondence with some of us on the pros and cons of AGW.

The GSL position papers state they have been prepared '*based on analysis of geological evidence, and not on analysis of recent temperature or satellite data, or climate model projections.*' And certainly, a key finding, '*the only plausible explanation for the rate and extent of temperature increase since 1900, is the exponential rise in CO₂ and other greenhouse gases in the atmosphere since the Industrial Revolution*', is not in line with the IPCC claim (in AR5 SPM), that '*Anthropogenic influences have likely affected the global water cycle since 1960*', and that '*more than half*' of the warming since 1951 is due to AGW. The IPCC also claim that '*Anthropogenic greenhouse gas (GHG) emissions since the pre-industrial era (variously claimed to be between 1750-1880) have driven large increases in the atmospheric concentrations of ... CO₂*', which nobody seriously denies, but they do not claim that this resulted in warming before 1951/60, as the GSL appears to.

The IPCC position matches observations that almost half of the warming that has occurred over the last 150 or so years since industrialisation, had already happened by 1943, well before the rapid rise of industrial CO₂. This difference of opinion is critical, for if CO₂ did not cause the pre-1943 warming, the claimed consensus that Catastrophic AGW is caused by human CO₂ emissions since the Industrial Revolution, which is supported by GSL, must be mistaken.

While there remain other areas of disagreement over the science of Global Warming and Climate Change (which are not the same thing), we can probably all agree that the 2010 position paper and the 2013 addendum need updating. And as this update will be critical in deciding future climate policy world-wide, we propose that any updated paper should come from a full and open discussion of the science, and not just from the ideas of a small group however well qualified. We suggest that such a process could be achieved by adopting methods of review used by other professional societies, particularly the APS, AAPG, and APPEA copies of which are attached.

We also believe the GSL has a responsibility to refute the exaggerated claims that swirl around the fringes of the Climate Change debate, undermining the real science - such as that CO₂ and Climate Change cause:

- more hurricanes, more rain, more drought, more asthma and now, even more terrorism (through drought in Africa),
- the exceptional cold and warm recorded over most of the sub-Arctic, Northern Hemisphere during the past winter and spring are what we should 'expect' from Global Warming.

As this letter makes clear, it is not true that 97% of scientists unreservedly accept that AGW theory is fixed, or that carbon and CO₂ are 'pollutants' and their production should be penalised; how can the primary nutrient in photosynthesis be a pollutant? We also note that 700 scientists have made [submissions to the US Senate expressing dissent](#) from the consensus and [166 climate scientists issued a challenge](#) to Ban Ki Moon on the eve of the Copenhagen Climate Summit in 2009 to provide proof of human induced global warming, which he did not do.

Even once respectable journals like the New Scientist, still uncritically peddle such social media nonsense as the infamous Hockey Stick, that seems to have lost the otherwise well documented Medieval Warm period. 'Global Warming' is on everyone's lips with each month/year claimed to be the 'hottest ever' - based on IPCC's 'adjusted' land and marine temperature data; however, the 'pause' in average temperatures since the 1998 el Niño, as documented by almost all recent temperature data, suggests global warming is no longer happening. Both claims cannot be correct, and, by saying nothing about these differences, the Society is supporting rather than resolving them.

By restricting the review to the geological evidence, independently of IPCC theory and modelling, the GSL signalled an independent scientific approach. But by excluding an evaluation of the modern climate record, the committee has failed to notice or account for these and other inconsistencies in AGW theory.

The Energy Matters blog was a useful first step in focusing on these issues but, as it is not 'peer reviewed'¹ in the way that scientific papers generally are, we suggest something more formal is needed, such as a 2-day conference to explore all sides of the issues raised, with a strong neutral moderator.

Topics for such a dialogue could examine the evidence that

1. CO₂ alone as the principal driver of temperature, or climate.
2. Climate Change is largely real, natural, and mostly beyond our control.
3. Manipulation of climate data has been used to support 'global warming'.²
4. Most climate alarms are little more than scaremongering.
5. CO₂ is mainly beneficial, NOT dangerous but blanket decarbonisation is.

¹ Peer reviewing is only of value if the reviewers are without bias, which is increasingly rare in politicised sciences such as climate change; the web, like Guttenberg's press, has opened up new vistas of thought and expression.

² <https://thsresearch.files.wordpress.com/2017/05/ef-gast-data-research-report-062717.pdf>

6. Industrial effluents and plastics, deforestation and overfishing are dangerous– and are being side-lined by the focus on CO₂ emissions.

The world's climate system, as defined by the IPCC,³ is a '*coupled non-linear chaotic system*', for which '*the long-term prediction of future climate states is not possible*'. This is due to the impossibility of describing precisely the initial conditions, and to instability generated by the mathematics causing cumulative errors in the modelling process, which combine to make a '*correct*' solution impossible. This alone should make the authors of the GSL statements cautious about their very confident acceptance that CO₂ alone has driven temperature and climate since 1900.

The IPCC AR documents address some of the uncertainties, and are generally much less biased than the SPMs (Summary for Policymakers) which get all the media attention, which is unfortunate, as it is apparent that they are largely written not by scientists but by an '*assemblage of representatives from governments and NGOs, with only a small scientific representation*.'⁴ Their heavy political bias not only undermines the scientific content, it supercharges the '*overwhelming consensus for human induced climate change*' which is mindlessly promulgated by the media year in, year out. The façade of consensus, helped by the data adjustments promised in the Climategate emails, negates the '*creative conflict between theory and data*' which is missing in this debate and which we suggest the GSL can revive. It is to be hoped that the frequent use of conditionals 'may' and 'could' in the current papers will be reduced, as a document that will affect government policy for years needs to be more specific about the levels of uncertainty in its pronouncements.

We also note the difficulty of publishing anything that does not confirm the IPCC AGW position, again, as promised in Climategate emails; and also, the '*ad hominem*' attacks rather than data refutation that too often characterises the debate, and we hope that this will not prevent the committee considering data that does not appear to support its position paper conclusions.

We do not expect that all of our concerns will survive the test of time, and we assume GSL would similarly accept that new data may well change the '*consensus*'. Climate models fail to model past climates accurately and consistently overestimate future temperature trends, nor are they able to explain the following:

- The current hiatus or pause in warming.
- Why the 285 ppm of atmospheric CO₂ estimated for the beginning of the Industrial Revolution is in any way, a desirable benchmark. It coincides with the Victorian Little Ice Age, a period of starvation and population decline, which cannot possibly be a desirable target, unless you want to depopulate the earth.
- Climate models always predict higher temperatures than actually occur
- The absence of the predicted tropospheric hotspot – the '*fingerprint of AGW*'.
- CO₂ and temperature were higher than today during the previous 50 million years plus, with no CAGW effects, why not?

³ Chapter 8 of the 2000 IPCC report titled "Model Evaluation"

⁴ <https://arxiv.org/ftp/arxiv/papers/0809/0809.3762.pdf>

- The natural warming of 8°C and ~100ppm increase in CO₂ during the Holocene up to the 1800s, and the subsequent 125 ppm increase in CO₂ after 1950, accompanied by a miserly ~1°C temperature rise.
- The Holocene enigma of generally falling but fluctuating temperatures from ~3,000_{BP}, accompanied by rising CO₂ that predates industrial CO₂ emissions.
- How AGW theory relies on radiative transfer only to heat the planet, and seemingly ignores insolation, enthalpy and water vapour.
- The inability of the science of AGW to sharpen the range of estimates of climate sensitivity (currently between 1.5 °C and 6.4°C according to GSL) despite over 30 years of hugely funded effort; surely the science has failed?
- Earth System Sensitivity concept introduced by GSL, which '*could be twice*' climate sensitivity' noted above (2013 Addendum, page 4)

Such rational failures have to be of concern to the GSL as they demonstrate that CO₂ alone does not, nay cannot drive global warming, so how can it drive climate change? And if it does not, there is no reason for the uncritical acceptance of the UN/IPCC focus on penalising CO₂ emissions?

The discussions in the Energy Matters blog suggests that the GSL position papers do not '*prove*' that average global temperatures are accurately measured or agreed, or that human CO₂ driven '*warming*' is real and/or dangerous, or that CO₂ is effective in changing the climate beyond natural variability. The position papers would not have included the beneficial effects of CO₂ in greening the planet, as this was not widely reported until July 2013 CSIRO study. However, the benefits that cheap reliable electricity can bring in preventing over 4 million annual deaths from indoor air pollution from burning bio and other solid fuels, has been obvious for some time. Even if CO₂ did drive some warming, is it more dangerous to more people than this very real pollution faced daily by well over 200 million in the developing world?

We fully support the Society's involvement in the climate change debate but believe that the apparent failures of AGW theory noted herein, calls for a re-think. Climate is and always will change, but the evidence that this is due primarily to CO₂, is not forthcoming. If the strong natural forcings that are so well described in the GSL papers have more impact than CO₂, then we should be spending more of our limited resources on finding ways to adapt to negative climate change.

We are aware that the board has duties to the Society, to the prestige of the science and to Fellows, in that order perhaps, but think any formal statement by the Society should at least acknowledge the views of dissenting Fellows. Climate Change (which is only ever portrayed, without any justification, as dangerous) has become the critical issue of our time and informed dissent, cannot be swept under the carpet or dismissed as '*unscientific*' or '*denialist*', as it too often is; '*Rebellion is the deepest root of science; the refusal to accept the present order of things,*'⁵ but seemingly not anymore in Climate Studies.

⁵ Carlo Rovelli: The Order of Time.2017

The GSL has taken a strong independent position; the Carbon Cycle is a genuine geological concern, but interpretation of the data is subject to increasing uncertainty as one goes back or forward in time, so firm conclusions based only on experimental data (the geological record) are likely to be unsound. As one of my correspondents puts it *'The Society can make comments regarding the complexity of the physics and mathematics and inevitable uncertainty of predictions of nonlinear dynamical system behaviour etc., and there is nothing wrong with having a debate about this... But ... their conclusions are unwarranted and unsound science if based on geological evidence alone.'*

Science is supposed to use all the available tools at its disposal and by excluding the modern record it would be even more sound to avoid tacit support for the proposition that *'the science is settled'*. And even if everything the IPCC is frightened of looks inescapable, applying the precautionary principle by penalising carbon regardless has shut down debate creating more harm than benefit. Better by far to look at ways of mitigating possible effects until the evidence becomes firmer, one way or the other.

The strength of the Society is that Fellowship is not just open to people who share a current *'consensus'*, what was once accepted has often fallen by the wayside as arguments are overturned; Murchison and Sedgwick, uniformitarianism and catastrophism, Piltdown Man.

We would like to make a presentation of our findings to the board, as much of what is relevant can best be understood with reference to data. However, we have no wish to monopolise this discussion in any way, as we believe the issues need raising before as many interested parties as possible. And it is for this reason we are calling this an open letter and will circulate it through media channels after the forthcoming AGM.

Yours sincerely

Howard Dewhirst FGS,

on behalf of the following:

Active Fellows:

Geology unless stated

Chris Atkinson	Singapore	BSc, PhD	FGS, PESGB, SEAPEX
Nigel Banks	United Kingdom	BA, DPhil	FGS, AAPG, SPE, PESGB
Dave Bodecott	United Kingdom	BSc, MSc	FGS, AAPG, PESGB, IOD
David Boote	United Kingdom	MSc, PhD	FGS, AAPG, PESGB
Bernard Cooper	United Kingdom	BSc	FGS
John Cope	United Kingdom	BSc, PhD, DSc, C. Geol	FGS (Snr Fellow), GA
Cameron Davies	United Kingdom	BSc, PhD, DIC	FGS
Howard Dewhirst	United Kingdom	BA, MA	FGS, AAPG, SPE, PESGB, PESA
Tim Harper	United Kingdom	BSc, PhD, MSc, DIC, C. Eng	FGS, IOM3,
Graham Heard	United Kingdom	BSc	FGS, CGeol, PESGB, AAPG, PESA
David Jenkins	United Kingdom	MA, PhD	FGS, AAPG,

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James Moffatt	South Africa	MA	FGS, GSA, AAPG, EAEG, PESGB
Philip Mulholland	United Kingdom	BA, MSc	FGS, AAPG, EAGE, PESGB
Michael Oates	United Kingdom	BSc, PhD	FGS, GA
Ian Plimer	Australia	BSc, PhD	FGS (Hon), FTSE, FAIMM
Chris Pullan	United Kingdom	BSc	FGS, PESGB
Michael Ridd	United Kingdom	BSc, PhD	FGS
Michael Seymour	United Kingdom	MA, MSc, DIC	FGS, PESGB (former Chair)
Richard Stabbins	United Kingdom	BSc, PhD, C. Geol	FGS (Snr Fellow), PESGB (Hon Mbr)
Barry Squire	United Kingdom	BSc, PhD	FGS
David Warwick	United Kingdom	BSc	FGS, PESGB
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Enzo Zappaterra	United Kingdom	PhD, C. Pet Geol	FGS, AAPG, PESGB

Former

Fellows:

David Bowen	United Kingdom	BSc, PhD	FGS (former); Life Fellow INQUA
Frank Brophy	Australia		
Gary Couples	United Kingdom	BS, MA, PhD	FGS (former), SPE, AGU, AAPG
Trish Dewhirst	Australia	BSc, B. Ecom	FGS, AusIMM, PESGB (all former)
Henry John Dodwell	United Kingdom	BSc, MSc	FGS (former), currently PESGB
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Concerned Colleagues:

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Robert Merrill	USA	PhD	AAPG, SPE, GSA
Paul Messenger	Australia	BSc, PhD	Aus IMM (former), GSA (former)
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Alex Pope	USA	BS	NASA retired
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Subsequent signatories:

Viv Forbes	Australia	BSc	AusIMM
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Simon Kendall	United Kingdom	BSc, MSc	FGS (former)
David Middleton	USA	BS	SEG, AAPG, HGS
Carlos Venturini	United Kingdom	BSc, MSc, PG Dipl	FGS, PESGB

Links:

APS: American Physical Society: <https://www.aps.org/policy/statements/upload/climate-review-framing.pdf> <https://www.aps.org/policy/statements/climate/index.cfm> .

AAPG: <http://www.searchanddiscovery.com/documents/gerhard/index.htm>

AICHe: <https://www.aiche.org/resources/publications/cep/2017/july/che-context-members-will-shape-aiches-climate-change-policy>

APPEA: <https://www.appea.com.au/wp-content/uploads/2016/02/Climate-Change-Policy-Principles-APPEA-final.pdf>

SPE: <http://webevents.spe.org/webinar/13400>

CAPP: Canadian Association of Petroleum Producers; <https://www.capp.ca/responsible-development/air-and-climate/climate-change>

Climate Change Tutorial; District Court of California, 10/3/2018. <http://co2coalition.org/wp-content/uploads/2018/03/Happer-Koonin-Lindzen.pdf>

GWPF: <https://www.thegwpf.org/state-of-the-climate-report-reveals-23-year-temperature-pause-in-the-stratosphere/>

Letter to Scott Pruitt EPA: <https://www.heartland.org/template-assets/documents/06-07-18%20EPA%20Pruitt%20NIPCC%20Submission.pdf>

Selected Blogs:

<http://euanmearns.com/the-geological-society-of-londons-statement-on-climate-change/>

<https://www.thegwpf.org/content/uploads/2018/03/State-of-the-Climate2017.pdf>

<https://notalotofpeopleknowthat.wordpress.com/2018/01/17/the-geological-society-of-londons-statement-on-climate-change/>

<https://wattsupwiththat.com/2018/01/30/what-are-in-fact-the-grounds-for-concern-about-global-warming/comment-page-1/#comment-2730698>

Covering email sent to GSL President 1st June 2018

Dear President,

Attached is an open letter to yourself as President of the Geological Society of London, together a series of referenced attachments. The letter is written in the spirit of scientific enquiry, not political correctness and has been prepared on behalf of a group of colleagues, whose names are included in the letter, to raise the possibility of a new edition of the GSL's position papers on climate change. We wish to raise awareness of the seriousness of our concern by making this an open letter, and plan to issue it to the media after the Society has had an opportunity to consider it. We do this not to pressure the Society in any way, but because, as we note in the letter, a new GSL position paper '*will be critical in deciding future climate policy world-wide*', hence '*any updated paper should come from a full and open discussion of the science, and not just from the ideas of a small group*'.

We are particularly impressed by the thoroughness of the American Physical Society Climate Change Statement Review Workshop Framing Document and the Climate Change Statement Review Subcommittee, 20 December 2013, copies of which we attach, together with examples from other societies and other relevant publications which we hope you will find useful in any approach a review.

The issue of Climate Change is too important for it to be the preserve of a small group of Fellows, no matter how well intentioned and qualified. Despite what you might read in the media, and as this letter shows, 97% of scientists do not accept the IPCC Theory of Catastrophic Anthropogenic Global Warming and we don't believe the GSL should do so quite as unquestioningly as they have done heretofor.

We have no special agenda but to seek the truth lost in what has become a hugely political issue, where open dialogue has become almost impossible. We are sure this is something the GSL would be concerned with and would want to take a lead in restoring the balance.

Yours Sincerely

Howard Dewhirst