

JANUARY 2025 NEWSLETTER



A Happy New Year to you all, and welcome to the first newsletter of 2025.

Looking back at 2024 is a sobering exercise. It is virtually certain that 2024 <u>will turn out to have been the hottest on record</u>, and the first year in which the global average rise in temperature above pre-industrial levels breaches the 1.5°C target set by the Paris Agreement.

But in the spirit of the two-faced god Janus we also have to look forward to a year of renewed campaigning to combat climate change and protect the natural environment, recognising that the need for action is all the more urgent. As humanists we know that we have to take responsibility for our future, and to find encouragement in the commitment of our fellow human beings, as demonstrated in the past year. Contributions to this newsletter look at some of the effects of climate change and how they need to be tackled.

As always, all signed contributions to the newsletter represent simply the views of the individual writers and are not necessarily endorsed by either Humanist Climate Action or Humanists UK.

CLIMATE CHANGE: A FOOD SHORTAGE?



Nobody can fail to be aware of worsening climate change, even Donald Trump. What's the worst that can happen? Is it the increasing temperature, and lengthy periods of drought that should be our top concern? We certainly don't want anything near <u>Delhi's killing 52.3C</u>, but no, it's not high temperature or drought. So, what about wild and wilder weather, mass flooding and very strong winds? Valencia and Malaga and parts of the UK are just a few examples. And now we have the recent deadly wildfires in Los Angeles.

People have lost their lives and property to these events. This is bad but not bad enough to make it to number one. Then there's the certainty of rising sea levels. Eventually, hundreds of millions of people will have to move from their sea-flooded homes, including Brits. Bad, very bad, but still not quite bad enough to take the top prize. All the above will contribute to something incredibly more dangerous than any single adverse climate change outcome. The winner, for the eventual most deadly result of climate change, is the huge, negative impact on food production. We are very likely to run out of food in, perhaps, less than ten years' time. World-wide malnutrition and starvation are on the cards. The UK will not be immune.

How do we know this? First off, simple common sense will tell us that the various adverse effects of climate change will make farming and food production more difficult. But there is also much expert, scientific comment:

- The Government's own Climate Change Committee has raised concerns over 'food security' on 6 separate occasions.
- Three major UN organisations, supported by hundreds of scientists, have mentioned the problem. UN Framework Convention on Climate Change said: 'In the not too distant future food production, if heating continues, will decline across many countries...' UN Food and Agricultural Organisation: 'Climate change threatens our ability to ensure global food security.' And the Intergovernmental Panel on Climate Change: 'Food security will be increasingly affected by projected future Climate Change.'

• Our own Met Office has said 'A changing climate impacts crop growth.'

The Government has in November 2024 <u>announced</u> £5 billion over 2 years for farmers. However, this is not all for increased food production. It covers grants for improving the environment and for sustainable farming. It partly replaces the Basic Payment Scheme so it is not all new money. When in the EU in 2019, farmers received £4.7 billion in CAP funding.

The £5 billion is a welcome small step in the right direction but it's not enough and is insufficiently targeted on increased food production. There is also a lack of connected-up thinking across government departments. This is demonstrated by plans in place to reduce farming land by thousands of acres through siting solar panels and housing. This is not necessary. Legislation could require all new builds, both housing and commercial, to have solar panels, as should most of the government's own 13,000 buildings. New housing density could be very substantially increased – high rise flats – and sited on non-farming land where possible. So, we are losing about 75,000 acres of farming land each year and in ten years our population is on course to increase by at least five million. More mouths to feed with less farmland. Greenhouse-gas-free energy and water provision are also essential future elements. What we need is a new government department, with broad powers across all of government, the Department for Climate Change. It would coordinate action and ensure we are heading in the right direction with climate change adaptation.

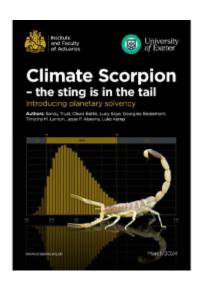
Nigel Blackmore

Nigel Blackmore is a retired civil servant whose appointments included six years at the Department of Education managing a budget of £1 billion for the Education Standards Fund.

ACTUARIES AND CLIMATE CHANGE

Actuaries quantify investment, mortality and other risks to determine premiums and reserving requirements so as to maintain the solvency of insurance companies and pension funds. The consequences of climate change are already an important risk factor for many aspects of actuarial work, including both asset and liability issues in pensions and insurance, and they are likely to become even more significant in future.

While the scientific consensus is that climate change associated with global warming is on-going, the scale and timing of its impacts are uncertain. The effects of climate change could potentially have a wide-ranging impact on health and mortality, physical assets, and financial markets. So actuaries cannot ignore climate change risks. Increasingly, key stakeholders (for example company boards and regulators) are also expecting actuaries to consider the potential impact of climate risks. This has prompted the professional actuarial bodies, including the Institute and Faculty of Actuaries (the IFoA) in the UK, to engage with Earth System scientists on global warming from the perspective that climate change is a risk management problem — one of the most important goals of climate change policy should be to limit the probability of a very bad outcome to an acceptably low value.

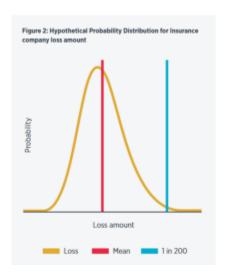


<u>Climate Scorpion – the sting</u> is in the tail is the third report from the IFoA in collaboration with scientists on global warming, and builds on earlier work on climate change tipping points and climate scenarios to explore two critical issues:

- How much hotter will the world get, and by when?
- What are the implications for society and how do we manage these risks?

The report argues that the actuarial approach to the long-term financial solvency of insurance companies and pension funds provides a logical framework to look at climate change, so as to protect citizens from the ruin of their environment. A useful review is available in this <u>YouTube presentation</u> by Sandy Trust, the lead actuarial contributor, which includes a number of slides depicting some of the many graphics which illuminate the ideas developed in the report.

The following figure taken from the report illustrates the general form of the probability distribution of the claims of an insurance company derived from scenario modelling. It may be reasonable to base insurance premiums on the 'mean' but capital requirements should take account of more adverse outcomes. In practice, to ensure solvency except in the event of extreme losses, UK insurance companies are required to hold capital sufficient to meet losses at the 1 in 200 level (so that the probability of losses at this level or higher is 1 in 200).



Section 1 of the report advocates a similar focus on the 'tail' when looking at climate change, adapting financial services techniques to assess and communicate climate risks more effectively to policy makers, supporting long-term policy decisions, and introduces the concept of Planetary Solvency. Here is a brief synopsis of the remainder of the report:

Section 2, 'The sting in the tail – expected warming, extreme events, climate overshoots and uncertainty', explores the difficulties in estimating the future rate of global warming, and the risk that it could be faster than currently projected.

Section 3, 'Risky business – exploring the interconnectivity of risks', considers the complex basket of interconnected risks that could threaten the basis of our society and economy: failure to consider these interactions will underestimate risk. It explores how climate change is a driver for four systemic risks – emerging infectious diseases, food insecurity, water security, and extreme heat stress, using a hazard, exposure, vulnerability and response model.

Section 4, 'Management actions for a stable climate', considers how to develop a planetary solvency risk assessment approach to climate change, which if implemented would probably lead to radically different climate policies. It recommends:

- Carrying out a realistic risk assessment of climate change as a matter of urgency, and acting on it
- Educating and taking action to accelerate positive tipping points in the economic system
- 3. Developing a Planetary Solvency framework to support human prosperity, now and in the future

The report concludes with a short discussion of long term targets and actions to manage risk, which will be explored in future IFoA reports, together with some implications for financial services firms.

John Coss

John is Vice-Chair of Stockport Humanists.

'THE POLLUTER PAYS'

(excluding water companies dumping sewage in our waterways)



The UK is consistently ranked as one of the worst countries in Europe for water quality. Over three quarters of our rivers fail to meet required health standards and face multiple threats. The poorly maintained sewage system uses storm overflows from treatment works, pumping stations and combined sewer overflows from the sewer network to dump raw sewage into our rivers. Lack of investment by water companies means the existing infrastructure can't cope.

The law permits water companies to spill sewage only during exceptional circumstances such as extreme weather, but in reality human waste is <u>routinely dumped in waterways</u> even when it is not raining heavily. In 2023, total discharges from the 14,000 storm overflows releasing untreated sewage into rivers and coastal waters increased by 54% to 464,056 spills, according to data submitted to the Environmental Agency (EA) by the industry. The data reveal the duration and the number of discharges, showing 3.6m-plus hours of raw sewage and rainwater discharged. 40% of South West Water outflows discharged raw sewage more than 40 times, while nearly 33% of United Utilities outflows and 23% owned by Yorkshire Water discharged 60 times or more.

An investigation by the Office for Environmental Protection <u>found</u> that Ofwat, Defra, and the EA all failed to stop water companies from discharging sewage into rivers and seas in England when it was not raining heavily. The Government, its water regulator, and the EA could all be taken to court over this failure.

Meanwhile, this widespread underinvestment and toothless regulation is to blame for the rise in water bills over the next five years. How much extra bill-payers will be charged depends on what part of England or Wales you live in, and which water company supplies you, but as the industry regulator Ofwat confirmed, the <u>average bill will go up 36%</u> over the next five years. The increases are below what the water firms wanted, but not far off.

Ofwat has said that the increases are needed to pay for improvements to crumbling infrastructure, but we should be furious about the level of sewage pollution in our rivers, lakes, and seas when there has been money to spend on shareholder payouts and bonuses to water executives who are overseeing this catastrophic failure (£41m in bonuses since 2020).

Research <u>shows</u> that treated as well as untreated sewage causes more damage than runoff from farms, and is the greatest threat to river biodiversity.

The <u>Water (Special Measures) Bill</u> is currently passing through Parliament. It has been considered by the House of Commons Public Bill Committee which was expected to report by Thursday 16 January. The Bill has four key aims:

- Block bonuses for water company executives "who pollute our waterways"
- Bring criminal charges against "persistent law breakers"
- Impose automatic and "severe" fines for wrongdoing
- Enable independent monitoring of every sewer overflow outlet

With climate change having long been predicted to bring higher rainfall levels, this may be a start, but it is a far cry from what's required.

Geoff Sallis (member of HCA Steering Committee)

ONE SMALL STEP

Continuing our series on actions to take through the year







Do you like books?

I may be wrong but I suspect most humanists like books. I also assume many humanists like buying second-hand books from charity shops and browse with pleasure when they have time. When I started a literature course recently, I wondered how and where I could purchase the specific books that were required and found that there are second-hand booksellers online that have very comprehensive collections. Today I purchased three books for £11 including standard postage from Biblio, the Ethical Consumer's top-scoring online second hand book shop. The others that are recommended are Better World Books, World of Books, and Awesome Books.

For those without a local library I would thoroughly recommend exploring these options. Don't forget they have kids' books too, and you can pass on books you no longer need or take them to a charity shop.

Pauline Element

KEEP IN TOUCH

We welcome feedback and responses to items in HCA newsletters. We aim to exemplify the humanist commitment to rational discussion and debate. You can contact us at climateaction@humanists.uk. All newsletters to date can be found on the Humanists Climate Me aim to produce a newsletter every two months.