National Emergency Briefing

27th November, 2025.

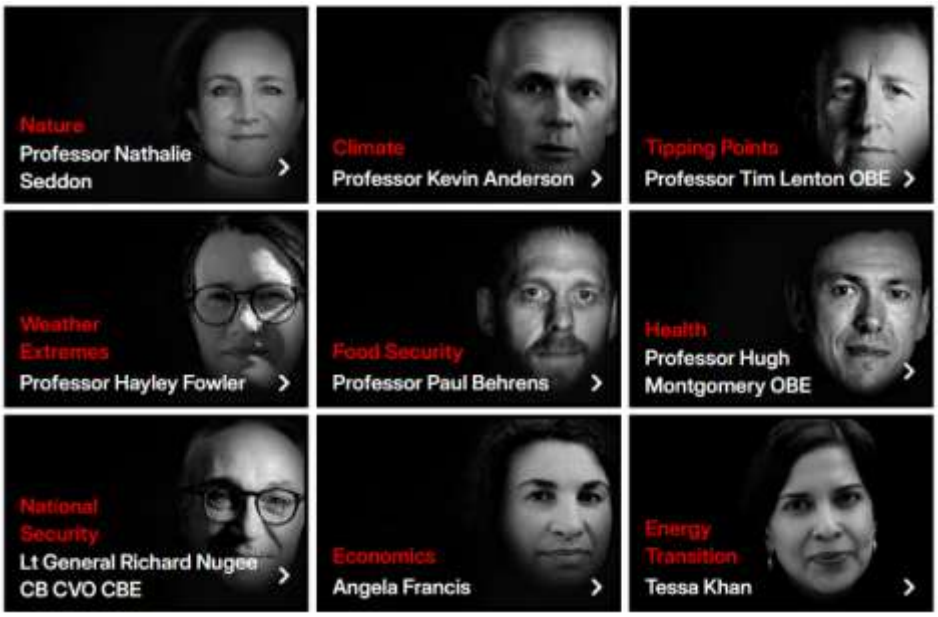
The climate and nature crisis is a multi-pronged emergency impacting all aspects of British life, from national security to the food supply. This briefing was commissioned to report the latest evidence, make clear what is at stake, and outline actionable solutions.

Opening Speech At The National Emergency Briefing by Chris Packham

https://www.youtube.com/watch?v=QddkB1jK4sU

Expert Briefings

On 27th November, ten of the UK's leading experts briefed an invited audience of over 1,200 politicians and leaders from business, culture, faith, sport and the media with the latest implications for health, food, national security and the economy.



Chair

Professor Mike Berners Lee

Expert in carbon footprinting at Lancaster University, and writer

Mike Berners-Lee works on the systemic challenge facing humanity in the Anthropocene. He is the author of acclaimed books, including A Climate of Truth, There Is No Planet B and How Bad Are Bananas? He is the founder of Small World Consulting which helps organisations to be part of a positive future.

https://www.youtube.com/watch?v=lpLxLp4j07Y

Watch all nine talks below:

https://www.nebriefing.org/

Nature

Professor Nathalie Seddon

Founding Director of the Nature-based Solutions Initiative and The Agile Initiative at the University of Oxford

Nathalie Seddon is Professor of Biodiversity at the University of Oxford. A former Royal Society University Research Fellow and recent recipient of a prestigious Marsh Award for Ecology, she trained as an evolutionary ecologist at the University of Cambridge and has over 25 years' experience working across ecosystems worldwide.

"Nature is not a 'nice to have'; it is critical national infrastructure."

Professor Nathalie Seddon

Key points from the briefing

- Nature is **critical national infrastructure**. When we destroy it, we increase floods, heat deaths, food insecurity and economic instability. When we restore it, we reduce risk, save lives and strengthen the economy.
- The UK is one of the **most nature-depleted countries** on Earth. Only about 53% of our biodiversity remains; **one in six species faces extinction**. This is a loss of vital functions — pollination, clean water, flood regulation - not just wildlife.
- **Nature loss is a national security and economic risk**. Continued degradation could cause a major economic shock - while leaving millions of homes exposed to flooding and heat.
- **Restoring nature is one of the highest-return investments available**. Wetlands, peatlands, hedgerows and urban trees cut flood risk, prevent heat deaths, protect food supplies, store carbon and create skilled jobs — at far lower cost than rebuilding after disasters.
- We are still **paying to destroy our own life-support system**. Public money and finance continue to subsidise pollution and ecosystem damage, actively increasing long-term risk.
- The public is ahead of the Government. **Most people want stronger action to protect and restore nature** - and the science shows we know exactly what works.

https://www.nebriefing.org/briefings/nature

Climate

Professor Kevin Anderson

Professor of energy and climate change at the Universities of Manchester, Uppsala and Bergen

Kevin Anderson is Zennström Professor of Climate and Energy at Uppsala University and Chair of Energy and Climate Change at the University of Manchester. A former Deputy Director of the Tyndall Centre, he has published widely in leading journals including *Science* and *Nature*.

"There's now a small but very real risk of 4°C by the end of the century. The prospects of three and four degrees centigrade of warming are absolutely dire" **Professor Kevin Anderson**

Key points from the briefing

- **We are pushing the climate far beyond the conditions that nurtured civilisation**. Carbon dioxide (CO_2) levels are now higher than at any point in at least 800,000 years, and still rising every year.
- 2°C of global heating is highly likely by 2050, and **there's a very real possibility of 4°C by 2100**.
- 3° to 4°C degrees of heating means the collapse of our systems. We would be in an extreme and unstable climate, far beyond the safe zone that our civilisation grew up in. **We would face the widespread breakdown of society, geopolitical instability, and the loss of any meaningful global economy.**
- If we keep burning fossil fuels, temperatures will keep rising. Cutting 'a bit' is not enough: **fossil fuels must be eliminated, or warming - and risk - simply accelerates**.
- **There is now no viable way to stay below the world's target of 1.5°C**. And at current emissions rates, **the world will use up the carbon 'budget' for staying below 2°C in just 13 years** .
- Every single month we burn through another 0.7% of the remaining budget for 2°C.
- UK 'climate leadership' is a myth. Once we rightly include aviation, shipping and imports, **UK emissions have fallen by only around 20% since 1990 - well under 1% a year -** and our UK current plans claim three times our fair share of the remaining global carbon budget.
- **Power stations using carbon capture, blue hydrogen made from natural gas, and bioenergy at Drax are delay technologies**, designed to avoid effective legislation, and keep polluters in business. After 30 years of promises, carbon capture and storage captures less than 0.03% of global fossil emissions. These technologies **completely ignore substantial overseas supply chain emissions** (which can't be captured), while locking in continued fossil fuel use at public expense.
- **We already have genuine solutions, and these must be deployed at emergency speed**. Insulation, renewables, electrification, public transport and energy efficiency already work now and cut emissions fast.
- **Fairness is essential to avoiding the worst impacts of climate change**. High-income, high-emitting groups - not ordinary households - are responsible for most emissions and must cut their energy use.
- The choice is stark. **Either we organise a rapid, fair transformation of society - or climate change forces chaotic, violent change upon us instead**.

https://www.nebriefing.org/briefings/climate

Tipping Points

- **Professor Tim Lenton**
- Founding Director of the Global Systems Institute at the University of Exeter
- **Tim Lenton** is Chair in Climate Change and Earth System Science at the University of Exeter and Director of its Global Systems Institute. He is q pioneer in identifying climate tipping points – the thresholds that can trigger irreversible shifts in the Earth's systems. He is also an expert in positive tipping dynamics, and his award-winning research has shaped understanding of the 1.5 °C target and pathways to sustainability.

"If we've crossed this tipping point in London, it's -20°C in three frozen months of the year, and in Edinburgh it's -30°C in five and a half frozen months of the year."

Professor Tim Lenton OBE

Key points from the briefing

- **Tipping points are thresholds beyond which change becomes unstoppable.** Once crossed, the climate can shift abruptly into a new stable state that is **extremely hard to reverse**.
- **The risk rises with every fraction of a degree.** As global warming moves beyond **1.5°C**, the likelihood of triggering **multiple, interacting tipping points** increases sharply - with cascading effects.
- **Some tipping points are already being crossed.** Coral reef systems have effectively tipped, threatening the livelihoods of about **500 million people** and removing vital coastal protection worldwide from storm surges made worse by rising sea levels.
- **The biggest risk for the UK is the failure of the Atlantic Meridional Overturning Circulation (AMOC).** This great ocean current keeps the UK's climate mild. It is **already weakening** and could tip at around **2°C of warming**.
- **An AMOC tipping point would transform the UK into an unrecognisable place.** There would be winters of **-20°C in London** and **–30°C in Edinburgh**, with Arctic sea ice likely to reach down as far as East Anglia. But there would also be hotter summers, combined with severe water shortages due to significantly lower rainfall. **This would end large-scale agriculture in the UK**.
- **Near 2°C, the odds of crossing this tipping point are worse than Russian roulette.** By around 3°C, it becomes **more likely than not**.
- **There is only one credible way to reduce this risk: accelerate to zero emissions fast.** The longer we linger above 1.5°C, the higher the danger.
- **The good news is that positive tipping points exist.** Clean technologies and social change can also become **self-reinforcing**, driving rapid transformation - as the UK already proved by tipping coal out of power generation.
- **Strong policy triggers tipping points.** We need clear ambitious phase-out dates for fossil fuels in cars, boilers, power and freight. We also need to activate market feedbacks that make clean options cheaper, faster and inevitable.
- **This is a race between two futures.** Either we trigger **positive societal tipping points** toward a clean, prosperous system, or we gamble on dangerous climate tipping points we cannot control.

https://www.nebriefing.org/briefings/tipping-points

Weather Extremes

Professor Hayley Fowler

Founding Director of the Nature-based Solutions Initiative and The Agile Initiative at the University of Oxford

Hayley Fowler is Professor of Climate Change Impacts at Newcastle University and one of the UK's leading experts on extreme rainfall and flooding. Her research advances understanding of how precipitation extremes are changing in a warming world and develops improved projections to guide climate adaptation.

"Could these European-style mega floods happen here? The honest answer is yes. There's no physical reason why not."

Professor Hayley Fowler

Key points from the briefing

- **Extreme weather is not a future threat — it's happening now.** Europe has already seen "mega" floods and lethal heat. The UK is not exempt.
- **The UK is getting wetter in winter, and faster than models predicted.** UK winter rainfall is up **around 10% since 1980**. That is **7.3 billion cubic metres** of extra water each winter, or about **3 million Olympic swimming pools**. The trend is worryingly around **25 years ahead** of global model projections.
- **Flood risk is becoming a national-scale issue.** By **2050**, **8 million** properties (1 in 4) in England could be at risk of flooding. An event of the scale of Storm Boris, which brought severe flooding to central Europe in 2024, would be a **national crisis** for the UK, with recovery taking years.
- **Extreme summer heat is escalating fast - and it kills.** The UK hit **40°C** for the first time on **19 July 2022**. This was linked to around **3,000 excess deaths**. The Met Office puts the chance of another **40°C day next year at around 4%** - and rising.
- **Wildfire is now a UK risk, not just abroad.** Hotter, drier summers are driving fires on heathland, forests and city edges — with fire services increasingly stretched beyond capacity during extreme heat.
- **Our infrastructure was built for a climate that no longer exists.** Raised reservoirs, drainage, housing and transport were designed many years ago when extreme rainfall was rare and less severe. As rainfall intensifies, risks such as dam overtopping and cascading failures rise.
- **The UK is not adapting fast enough.** The Climate Change Committee's assessment is blunt: progress is too slow, with **no sector outcome rated "good"**, and major gaps in governance, responsibility and funding.
- **Adaptation is a "triple win" - and it pays back.** Flood-absorbing parks, cooler greener cities, better insulation and resilient infrastructure protect people, cut bills, improve health and create skilled jobs, as in Copenhagen, which reinvented itself as a 'sponge city' after devastating floods.
- **This is the least extreme climate you will experience.** Until we stop burning fossil fuels, extremes keep worsening - so we must cut emissions **and** build resilience now.

https://www.nebriefing.org/briefings/weather-extremes

Food Security

- **Professor Paul Behrens**
- British Academy Global Professor and expert in food system transformations
- **Paul Behrens** is a renowned sustainability scientist and British Academy Global Professor at the Oxford Martin School, University of Oxford, where he leads research on the intersection of climate, energy, and food systems

"We have to be straight with people about the choices ahead, because if we don't lead this change on the front-foot, we'll be forced into it anyway as food shocks intensify."

Professor Paul Behrens

Key points from the briefing

- **Food system failure is a direct national security risk.** When food systems break, the result is empty shelves, price spikes, unrest and political instability — and the UK is **woefully unprepared**.
- **The climate that gave us reliable harvests is gone.** Compound extremes — heat, drought, floods and fires striking together across global breadbaskets — are becoming normal. For example, before climate change, a major corn harvest failure might happen once every 16 years, but at 1.5°C, this can be expected once every 3 years, and every other year at 2°C.
- **The UK is already feeling it.** Three of the **five worst cereal harvests on record** have occurred this decade. Over **80% of UK farmers** say climate change seriously threatens their livelihoods.
- **We are dangerously dependent on imports.** The UK imports **40–50% of its food**, much from climate-stressed regions like the Mediterranean. Extreme weather abroad now directly drives food prices and hardship at home.
- **Rising food prices are a social fault line.** About **one-third of food price inflation in 2023** was driven by extreme weather. When families cannot afford food, societies destabilise.
- **Our food system is undermining its own security.** It is a major driver of greenhouse gas emissions, habitat destruction, water and air pollution, freshwater depletion, resistance to antibiotics and pandemic risk.
- **A food system transformation is unavoidable - and beneficial.** We must shift to **healthy, plant-rich diets**, cut waste, improve production and make our farming methods more resilient.
- **Switching to a plant-rich diet is the biggest lever for improving food security.** Animal agriculture uses about **85% of UK farmland**. Moving to plant-rich diets could cut agricultural emissions by about **60%**, free up an area of land almost the size of **Scotland**, and allow the UK to feed more people from less land.
- **A plant-rich diet is a win-win for people, farmers and nature.** Health improves, NHS costs fall, water and air quality improve, flood risk drops, rural jobs grow, and farmers' incomes can rise if supported to deliver food, nature and climate security.
- **The choice is stark.** Lead the transition now, or be forced into it later by food shocks, rising prices and instability.

https://www.nebriefing.org/briefings/food-security

Health

- **Professor Hugh Montgomery**
- Director of the Centre for Human Health at University College London
- **Hugh Montgomery** is a Professor of Intensive Care Medicine at UCL and co-leads the Lancet Countdown on Health and Climate Change. A clinician, researcher, author, and environmental advocate, he founded UCL's MSc in Climate & Health and health-sector non-profit Real Zero.

"I'm scared for my own life and future. I'm absolutely terrified for that of my son."

Professor Hugh Montgomery OBE

Key points from the briefing

- **Dealing with climate change is no longer about "risk" - it is about survival.** The health hazards are escalating so fast that they will impact the survival of people alive today.
- **The evidence shows the situation is worsening year after year.** The **Lancet Countdown** tracks 20 indicators of the health hazards of climate change. In the latest report, **12 of 20 broke records**.
- **The real killer is the breakdown of our systems.** Heat, floods and fires do not just cause illness - they destabilise food supplies and economies. **Without a functioning economy and food security, you cannot run a health service.**
- We are already haemorrhaging economic capacity. Extreme weather is causing financial losses at astonishing speed, and major economic loss means **no NHS, no education system and no resilience**.
- **Taking action on climate change is the biggest health opportunity of our lifetime.** Policies on clean air, active travel, warm homes and plant-rich diets will **cut emissions and disease together**, making the NHS more sustainable.
- **The potential savings are huge.** Tackling obesity alone could save the UK around **£126 billion every year**.
- Without action, the hazards are catastrophic. **The climate emergency is a health emergency**, and we must treat it as one.

https://www.nebriefing.org/briefings/health

National Security

Lt General Richard Nugee CB CVO CBE

Senior British Army Officer (retired)

Lieutenant General Richard Nugee CB CVO CBE is a former senior British Army officer and leading voice on climate and national security. His 35-year military career included operational tours in Northern Ireland, the Balkans, Iraq and Afghanistan, where he served as Chief of Staff to NATO's ISAF Joint Command. He later became Chief of Defence People and was awarded the US Legion of Merit.

"We are facing the potential of an ungovernable state unless government takes this seriously."

Lt General Richard Nugee CB CVO CBE

Key points from the briefing

- **Climate change is now a core national security threat.** Defence institutions in the UK, NATO and beyond recognise climate as a **threat multiplier** - worsening existing risks and creating entirely new ones.
- **The threat picture is shifting faster than expected.** Climate shocks are driving instability, resource competition, displacement and conflict — from food and water stress to new geopolitical flashpoints like the Arctic.
- **Climate fuels global instability that directly affects UK security.** When livelihoods collapse, recruitment to non-state armed groups rises. When food and water are scarce, tensions escalate between states.
- **Instability abroad translates into instability at home.** Food price shocks, supply chain disruption, flooding, fires, heatwaves and uninsurable homes all increase pressure on public trust and governance.
- **The military is already being pulled into domestic climate emergencies.** RAF deployments to prevent dam collapse and respond to floods are **a preview of the future** if emissions cuts and adaptation fall behind.
- **The greatest risk is cascading crises.** Multiple shocks hitting simultaneously — food, health, infrastructure, migration, energy and extreme weather — risk overwhelming government systems and eroding democratic stability.
- **Unchecked climate impacts risk the UK becoming an ungovernable state.** They could cause not just a change of government, but the potential failure of democratic systems to cope under sustained stress.
- **Climate action strengthens national security.** Energy independence through renewables, energy storage and a decentralised grid based on renewables makes the UK more resilient and less vulnerable to hostile actors. It provides a safer, more stable society, including a stronger democracy.
- **This is not a future problem or a trade-off.** Addressing climate change is **central to national security today**, not something to postpone.

https://www.nebriefing.org/briefings/national-security

Economics

Angela Francis

Policy expert in green economics

Angela Francis began her career as an energy industry accountant before becoming an economist focused on low-carbon growth. She has worked across the UK, Europe, and the Caribbean – where she was Regional Economist and Climate Attaché for the Foreign and Commonwealth Office in the Caribbean.

"Our rules aren't working - and it's government's job to change the rules when there are obvious market failures like this."

Angela Francis

Key points from the briefing

- **Economic transitions are disruptive but standing still is far more dangerous.** Every industrial transition creates winners and losers; clinging to the status quo delays change and increases risk.
- **Today's markets are broken.** They assume a stable climate, clean air, fresh water and functioning ecosystems - while rewarding businesses that damage them and penalising those investing in resilience.
- **This is a textbook market failure, and it is government's job to fix it.** New rules must consistently reward lower carbon, restored soils, standing forests, circular resource use and reduced waste.
- **Vested interests are slowing the transition.** Profitable fossil fuel and extractive sectors lobby to protect the old system, just as the tobacco industry once did - even though they could diversify.
- **The economics are clear: action is cheaper than inaction.** The cost of inaction massively outweighs the cost of action, even on cautious estimates.
- **Net zero is affordable, and it pays back.** The UK investment needed is around **0.2% of GDP per year**, and would be largely funded by the private sector, with clear long-term returns.
- **Faster transition is cheaper.** Research shows a rapid energy transition saves **$12 trillion globally** compared to sticking with fossil fuels: more than twice the savings of a slow transition.
- **Climate action cuts the cost of living.** Inflation would have been significantly lower if we had decarbonised power, heat and food systems earlier; delay has already made households poorer.
- **The best way to get other countries to act is for the UK to lead by example.** Acting early accelerates innovation, lowers costs worldwide and increases the UK's chance of being a high-value producer in future industries.
- **The test of success is simple.** Policies can and must make **households better off**, reduce risk and build resilient businesses. The jobs then follow.

https://www.nebriefing.org/briefings/economics

Energy Transition

- **Tessa Khan**
- Energy transition expert
- **Tessa Khan** is a lawyer and campaigner and the founder and Executive Director of Uplift, an organisation that works towards a just transition away from oil and gas in the UK. Before founding Uplift, she was co-founder and Co-Director of the Climate Litigation Network, which supports strategic litigation around the world.

"The input to renewable energy - sun and wind - is free forever, while fossil fuel prices are set by cartels or the whim of dictators."

Tessa Khan

Key points from the briefing

- **Fossil fuels are the root cause of energy price shocks.** Around **half of UK recessions since 1970** have been triggered by fossil fuel price volatility - most recently forcing the Government to spend **£64 billion**, more than the defence budget.
- **Millions of people are already in energy distress.** Over **12 million UK households** are struggling to pay their energy bills - a direct consequence of our dependence on gas.
- **Renewables offer permanent price stability.** Sun and wind are free forever, unlike fossil fuels whose prices are set by geopolitics, cartels and conflict.
- **Clean energy is now dramatically cheaper than before.** In the last decade, offshore wind costs have fallen by **over 50%**, solar by **over 70%**, and battery storage by **over 80%**.
- **Electrification is far more efficient** than using fossil fuels**.** The fossil fuel system wastes around **two-thirds** of the energy it consumes; clean electricity avoids this loss entirely.
- **Upfront costs are a political choice, not a barrier.** Upgrading the grid and using heat pumps and insulation are merely growing pains - and delay only increases total costs.
- **Insulating homes is one of the fastest ways to cut bills.** Yet the UK still has some of the coldest, most heat-leaking housing stock in Europe.
- **The jobs transition in energy is already happening.** North Sea oil and gas employment has **halved**, even with new licences.
- **The UK has successfully upgraded its energy system before.** It did so in a decade, changing its infrastructure to use North Sea gas instead of gas from coal.
- **The prize from electrification is enormous.** A renewable, electrified system delivers lower bills, energy security, good jobs and a just transition for households and workers alike.

https://www.nebriefing.org/briefings/energy-transition

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