

## Dialogue with Anne Freeman:

**We are racing with time in tackling climate change risks**

**Anne Freeman:** Head of Flood Insurance and Coastal Erosion Policy  
in Department of Environment, Food and Rural Affairs.



专访安妮·弗里曼：

“ 应对气候变化 要与时间赛跑 ”

### Quotes:

*“The UK government is cautiously optimistic (on the Paris Climate Change Conference). ”*

*“The UK Climate Change Risk Assessment identified flooding as the greatest threat UK faces.”*

*“We plan to replace coal fired power stations with gas, closing them by 2025 and restricting use from 2023. ”*

*“If we do nothing to boost our resilience to a changing climate, the stability of the economy will suffer and will miss out on vast opportunities for growth.”*

Nandudu: The 2015 United Nations Climate Change Conference is in progress in Paris, attracting worldwide attention. Do you have any expectation on this?



**Anne Freeman:** The UK government is cautiously optimistic and is working hard with other countries to resolve outstanding issues, but it will be a challenging negotiation.

Nandudu: We noticed that you are working on a scheme named "Flood Re" over the past two years , what is the scheme for? How does it work?

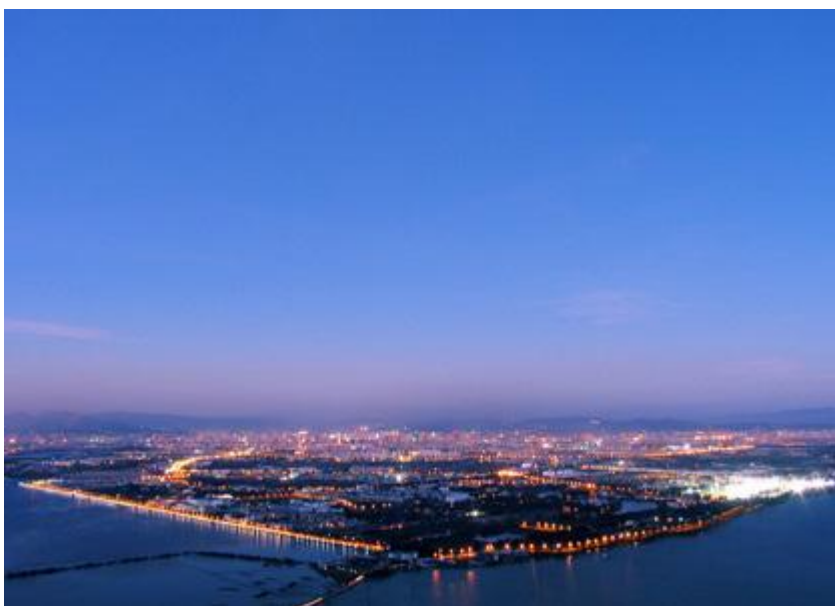
**Anne Freeman:** In the UK, individuals and businesses are expected to manage their own risks. There is no automatic or guaranteed government compensation or payment for repairs for individuals or businesses. A key way to manage the risk is therefore to insure against it. There is a very strong and long established insurance

market in the UK and for years it has worked well. However, insurers price according to risk, and the very properties which need flood insurance most could be denied cover by the insurance industry. So for years there has been an informal agreement between the insurers who are members of the Association of British Insurance and Government, that they would continue to provide cover for the highest risk properties, with some conditions. However climate change, a changing insurance market and better flood mapping meant that the system was becoming unsustainable. So after years of negotiation, Flood Re was developed to provide affordable flood insurance for those at highest risk.

As for how it works, homeowners will continue to look for insurance either directly with the companies or through a broker or a price comparison website. The insurer will decide whether a property is at high flood risk and whether they want to cede the policy to Flood Re. If they do, they pay a part of the insurance premium to Flood Re. That premium has been determined by reference to the property tax band. If the property floods, Flood Re will pay the claim to the insurer. Flood Re was in fact the insurers' idea. For them, Flood Re can provide benefits because it means they can continue to provide insurances to people while the most risky bit is taken away.

Flood Re is only a transitional measure, expected to last for 25 years. It is designed to smooth the transition to the free market, so to give time to householders, government and insurers to adapt. It is a part of the solution to climate change risks, but only part. It buys us some time, but not much. So far, Flood Re has got a lot of support, because everybody recognize that flooding is very traumatic. But that does not mean everybody supports it, some people at low flood risk don't think they should pay for somebody who choose to live by a river or at the coast. So it gets a little bit of criticism about that, but overall, most people are positive.

Nandudu: Speaking of living by river or coast, we are right now in China's Pearl River Delta (PRD), a lot of people living here are faced with the risks of rising sea levels and flooding, do you have any suggestions for our government to mitigate and adapt to these risks?



**Anne Freeman:** The UK Climate Change Risk Assessment identified flooding as the greatest threat UK faces. So we are in a similar position to this area. One thing is sure-- there is not one solution, a multi-pronged approach will be needed. Not only Government and industry, but also businesses and individuals will need to act.

Mitigation is important and particularly in reducing greenhouse gases. The Department of Energy and Climate Change has recently announced a new direction for the UK' s energy policy to ensure affordable, reliable and clean energy. There is greater emphasis on new nuclear and gas, including shale gas and offshore wind generation. We plan to replace coal fired power stations with gas, closing them by 2025 and restricting use from 2023. It is interesting that it isn' t just heavy industry or the energy sector that can play a part. My Department, The Department for Environment, Food and Rural Affairs (Defra) is supporting an industry led Agriculture Industry Greenhouse Gas Action Plan, which has delivered annual reductions of 1 million tonnes of carbon dioxide equivalent. Defra is working to plant 11 million trees in the next 5 years. Our forests act as a net carbon sink of 17 million tonnes of carbon dioxide equivalent. We are also acting to reduce waste and the emissions from waste. Emissions from waste have decreased since 2010 by 9 million tonnes

of carbon dioxide equivalent due to landfill diversion policies and improved gas management systems.

Adaptation is critical too. The government is making a record level 6 year commitment of £2.3 billion to invest in flood defence improvement schemes. This is forecasted to reduce the risk for over 300,000 households, up to 420,000 acres of agricultural land, 205 miles of railway and 340 miles of roads. The programme is projected to reduce overall flood risk by 5% and save the economy more than £30 billion in avoided damage over time. The funding for flood defences in England is based on a partnership approach. Central Government funding pulls in £600m in additional contributions from businesses and local government. Investment decisions are made on the basis of maximizing economic benefits in terms of the potential damages of flooding or coastal erosion avoided, taking account of local choices and priorities.

Planning plays a role too. The UK's National Planning Policy is clear that inappropriate development in areas at risk of flooding should be avoided. But where development is necessary, it should be made safe and resilient, and without increasing flood risk elsewhere. Under the National Planning Policy Framework, local plans should develop policies to manage flood risk from all sources and seek to

use opportunities offered by new development to reduce the causes and impacts of flooding.

Nandudu: You' ve mentioned measures taken by the UK government in mitigating and adapting to climate change risks. How about the insurers you are familiar with and energy entities we pay special attention to? What roles should they play in this process?

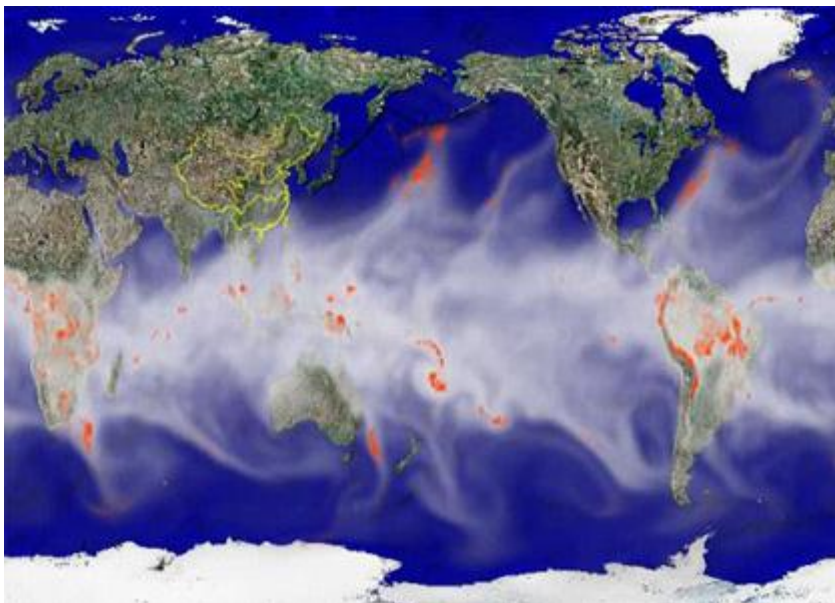


**Anne Freeman:** I think everybody has a role and responsibility. Insurers can incentivize behavior by providing insurance that changes people' s behavior, stipulating that you must do things in a particular way rather than another. Insurers also have huge amounts of capital and they can move their capital away from heavily carbon-producing industries, and that could have a powerful impact.

The energy companies obviously have got a very important role. They are really good at innovating, they also can invest in things which use cleaner, greener energy or in using resources more

efficiently. For instance, carbon capture & storage and using fuels like gas rather than coal. So there is potential there. And I think energy companies have an incentive to act, because there is money to be made in providing more sustainable supplies and they too will be affected by climate change. The UK's Climate Change Risk Assessment (CCRA) detailed how energy sector will be impacted by climate change and I think that could be a big issue in China.

Nandudu: Could you elaborate on UK's Climate Change Risk Assessment? What's its connection with the energy sector?



**Anne Freeman:** The UK has done one CCRA. It contains a specific technical report for the energy sector, titled 'Climate Change Risk Assessment for the Energy Sector'. The CCRA enables government to: 1) Prioritise UK level adaptation policy to make the UK climate resilient. 2) For the main risks, to understand which adaptation options (e.g. sea walls vs. coastal retreat) are cost effective and



flexible. The CCRA is a science and evidence based project – using existing data but adding new analysis and bring it together. The first CCRA was published in 2012, the second is due to be published in 2017, and the third in 2022. Defra contracted the first one out to specialized consultancy firms. The first CCRA characterized over 100 climate change risks and opportunities to the UK. It was a very useful exercise, but it did have limitations as many risks were not quantified and the long term uncertainties are very large. The assessment did not answer every question or enable simple comparison between all risks.

On the back of the CCRA, we developed a National Adaptation Programme–NAP. The NAP deals with the risks and opportunities laid out in the CCRA. It takes a pragmatic, risk based approach and set 370 ‘actions’ required to address risks. The delivery of the NAP is a shared responsibility across government (local and national). A progress report by our independent Adaptation Sub-Committee of our Committee on Climate Change and the Government’s response was published recently.

As the CCRA process is done on a cycle, we are preparing the next one at the moment. We have asked our independent Adaptation Subcommittee of the Committee on Climate Change to do the

assessment for us. We have learned from the first CCRA and will have more of a focus on:

- a. Interactions between risks and concurrent risks
- b. How current policies and measures are likely to alter risk levels and lead times
- c. Risks where new evidence has emerged
- d. Assessment of socio-economic factors interacting with climate change risk
- e. How overseas events could impact UK supply chains
- f. Policy areas with barriers to adaptation and/or where need for adaption is most urgent during the period 2017–2022

Nandudu: Apart from assessing climate change risks, do you have any specific methods in managing those risks?



**Anne Freeman:** Yes, the UK' s Climate Change Act introduced a power for government to direct public services organizations and

statutory undertakers, for instance, energy companies to report on how they are assessing and acting on the risks and opportunities from a changing climate. The reports should cover an assessment of current and predicted impacts to the organization as well as how the organization plans to adapt to the impacts. In the first round of reporting 91 organizations were directed to report, largely infrastructure companies in the energy, transport and water sectors as well as the economic regulators. In the second round of reporting which started in 2013 the government is using a voluntary approach to reporting, in which all the main players from the last round of reporting (so including the energy sector) are participating, as well as a small number of reporters. Reports under the second round are anticipated between 2014-2016 and will feed into the next Climate Change Risk Assessment and National Adaptation Programme.

Nandudu: That's impressive. So after so many years' working in this area, what do you think is the most important lesson you've got from your personal experience ?



**Anne Freeman:** I think is that if we do not learn from the past, we continue to make the same mistakes. Taking action now is hard, but will be better than having to act later. If you act now, the adaptations you have to make are less burdensome. I think it is about seeing this as an opportunity rather than mere burden. We know that great strides have been made in renewable energy and more efficient energy production over the past few years. So opportunities do exist. And the risks of not acting are so serious. If we do nothing to boost our resilience to a changing climate, the stability of the economy will suffer and will miss out on vast opportunities for growth.