1/24/05 040913
submitted
citizen comment

Energy supply, CO2 regulation, liability risks, and accounting for externalities.

011005

Q: What needs to be done to include externalities of CO2 production in Energy Supply (current and future) discussions?

If we know there are externalities, what is the rational for ignoring them? Isn't it financially prudent to evaluate them?

Mark van Soestbergen
Gainesvillian since 1979

Association of British Insurers

News Release

08 June 2004

Act today to manage climate change in years to come say insurers

ACT TODAY TO MANAGE CLIMATE CHANGE IN YEARS TO COME SAY INSURERS

ABI report highlights implications of climate change for insurers and their customers

Action to manage climate change risks can help ensure that widespread insurance cover remains readily available according to a report published today by the ABI (Association of British Insurers). A Changing Climate for Insurance analyses for the first time the practical implications of climate change for a key business sector and its customers. The report identifies the need for action by insurers and Government to manage climate change.

The report, prepared by Dr Andrew Dlugolecki, an international authority on climate change, highlights the impact that climate change is already having on the insurance industry, notably in changing patterns of claims arising from a greater incidence of extreme weather. It points to the need for a partnership approach between the industry and Government to prepare for the effects of climate change.

The report highlights the effects that changing weather patterns are already having:
- in the 1990's there was a significant increase in the number of months of both extreme hot and wet weather. During this decade there were 34 months of extreme hot weather, compared to a previous average of just 12 months per decade.
- the number of winter storms crossing the UK has doubled in the last 50 years;
- Weather- related claims on property insurance have doubled to over £6 billion between 1998 to 2003, compared with the previous five years. The report predicts that claims could treble if no action is taken.

Other sectors of insurance, such as health, motor and liability insurance could also be influenced by changing weather patterns.

"Managing the impacts of climate change is a major challenge for society – we already live with its effects everyday", said John Parker, the ABI's Head of General Insurance.
" Insurance is in the front line of climate change. Managing risk is central to our industry, and insurers must be equipped to analyse the new risks arising from climate change, and to help customers protect against them. "This report provides the industry with a platform to ensure that appropriate action is taken by insurers, Government and other stakeholders to effectively manage climate change. "

- Ends -

Notes for Editors

1. The report was prepared for the ABI by Andrew Dlugolecki. A chartered insurer with a PhD in Economics, he held a series of senor positions in the insurance industry and left Aviva plc in December 2000. During his career he became known for his work on climate change. Dr Dlugolecki has contributed to UK Government reviews and chaired two research reports on climate change for the Chartered Insurance Institute.

2. A copy of the report is available on www. abi.org.uk/climatechange.

3. The ABI is the trade association for Britain's insurance industry. Its more than 400 member companies provide over 94% of the insurance business in the UK. It represents insurance companies to the Government, and to the regulatory and other agencies, and is an influential voice on public policy and financial services issues. ABI member companies hold more than a fifth of all investments traded on the London Stock Exchange, on behalf of millions of pensioners and savers.

4. An ISDN line is available for broadcasts

5. Further enquires to:

Malcolm Tarling 020 7216 7410 (Mobile: 07776 147667)
Alan Leaman 020 7216 7440 (Mobile: 07957 482330)
Emma Quantrill 020 7216 7392 (Mobile: 07712 841183)
Lucy Butler 020 7216 7411 (Mobile: 07712 841184)

4.. An ISDN line is available for broadcasts.

Copies of all ABI news releases, together with other information from the Association, can be seen on our website http://www.abi.org.uk

58 /04

Notes to Editors

058/04

Title: Carbon Dioxide and Temperature Effects on Evapotranspiration and Water-Use Efficiency of Soybean.

Authors

- Allen, Leon - *hartwell*
- Pan, Deyun - UNIVERSITY OF FLORIDA
- Boote, Kenneth - UNIVERSITY OF FLORIDA
- Pickering, Nigel - UNIVERSITY OF FLORIDA
- Jones, James - UNIVERSITY OF FLORIDA

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Citation: Allen Jr, L.H., Pan, D., Boote, K.J., Pickering, N.B., Jones, J.W. Carbon Dioxide And Temperature Effects On Evapotranspiration And Water-Use Efficiency Of Soybean. Agronomy Journal. 2003. V. 95. P. 1071-1081

Interpretive Summary: Rising carbon dioxide (CO2) and global warming will likely cause changes in crop water use (crop transpiration) and thus affect soil water available for producing food. In order to test these effects, ARS scientists and University of Florida research partners at Gainesville, Florida grew soybeans in outdoor, sunlit chambers at controlled levels of ambient CO2 (350 parts per million, PPM) and doubled-ambient CO2 (700 PPM), and at a wide range of five temperatures with daily maximum values of 28 degrees Celsius (a comfortable 82 degrees Fahrenheit) up to 44 degrees Celsius (a sizzling 111 degrees Fahrenheit). Elevated CO2 always decreased crop water use and increased the water-use efficiency, the yield per unit amount of water used, of the soybean plant. However, the water required for transpiration at the highest temperature tested, 44 degrees Celsius, increased 2.5-fold compared to the water required at 28 degrees Celsius, with a corresponding decrease in water-use efficiency. These results show that, in the future, rising CO2 will decrease water use and increase water-use efficiency of crops, but, unfortunately, this benefit will likely be offset or even made worse if temperatures also increase.

Technical Abstract: Rising carbon dioxide (CO2) and potential climate changes will likely cause changes in crop evapotranspiration (ET). The objectives were to determine the impact of both CO2 and temperature on canopy ET and water- use efficiency (WUE) of soybean [Glycine max L. (Merr.)]. Plants were grown in sunlit controlled-environment chambers at sinusoidal daily temperatures ranging from 28/18 to 48/38 degrees Celsius (C) day/night maximum/minimum values at either 700 or 350 micromoles (CO2) per mole air. Elevated CO2 decreased ET and increased WUE. Maximum ET rates at 35 days after planting (DAP) ranged from 7.5 to 19.0 millimole (water) per square meter per second at 28/18 and 44/34 degrees C, respectively. Daily total ET (10-h period) ranged from 260 to 660 mole (water) per square meter during the middle of the season. Maximum WUE occurred early in the daytime (0800 h)

pushing us in the same direction. We must now all accept the utter futility of trying to shut our borders to problems abroad. Famine in Africa will affect our countries because it will be a trigger for mass migration. Conflict, too, drives millions to flee their homes. Both create the conditions for terrorism and fanaticism to take root and spread directly to Europe, to North America and to Asia. We spend billions on humanitarian aid to help pick up the pieces. A prosperous Africa, where its people have the chance to fulfil their talents, is in all our interests.

The sheer scale of Africa's problems can induce an understandable sense of hopelessness that progress can be made. It helps explain the shocking fact that aid to Africa, notwithstanding Britain's increased contribution, has fallen since 1995. But there are reasons for optimism. We have seen the emergence of a new generation of democratically elected African leaders, determined that their governments will work cleanly and effectively to improve life for their citizens. Their New Partnership for Africa's Development sets out a challenging agenda.

According to the World Bank, governance has been improving faster in Africa than in many other areas of the developing world. Conflict in Africa, although still devastating where it occurs, is also decreasing. Mozambique, a country brought to its knees by vicious fighting, has cut its levels of poverty by almost a third since peace. The civil war in Sierra Leone, thanks to the intervention of British forces, is over and the country is slowly recovering. The Africa Union is playing an increasing role in settling conflicts.

We know that the best way to reduce poverty is through economic growth. And we know that economic growth can be increased by aid. Fifteen countries in Africa had average growth rates above 4% throughout the 1990s. Half of Africa had growth of over 5.9% in 2001. Many of the countries which have benefited from increased aid, such as Uganda and Mozambique, have seen poverty fall over an extended period. Targeted British assistance, for example, has already enabled Uganda to introduce universal primary education and free basic health care.

We can also increase the effectiveness of our aid. Tied aid, directed by the priorities of the donor rather than the recipient and bypassing government systems, actually undermines effectiveness and internal accountability.

Getting others involved

I am proud that Britain's involvement is helping this progress. We are doubling our bilateral aid to Africa; it will reach £1 billion ($1.9 billion) in 2005, and will rise further. We have written off 100% of the debts of the poorest countries. We have dramatically increased help to tackle the big killers such as AIDS and malaria.

But to help Africa continue this progress we need a concerted, co-ordinated global effort. Ad hoc, short-term measures will not do. A comprehensive programme of action is needed with sustained commitment to implementation by Africa and by the international community. Truly, a new partnership is required. We need concerted action to improve opportunities and growth, to reduce debt, to tackle HIV, malaria and TB, to fight corruption and to promote peace and security. We also need to tackle trade barriers which push up prices for our consumers, prevent African countries exporting their products and see Europe spending more on subsidising its own farmers than on aid to Africa. This is an investment for our, and Africa's, future: more than half of Africa is under 15.

It is already clear what sort of measures are needed, and I believe the recommendations of the Commission for Africa, which will report in the spring, will take us further.

Action requires more resources, and now. There will be calls to double aid to Africa. I believe all the G8 members can do more: extending debt relief, providing more resources to tackle HIV, giving more girls the chance of education, reducing rates of infant mortality, building the infrastructure needed for private-sector growth. Investment is needed now, and we must look at ways to bridge the gap. Gordon Brown has set out one way we can do so through the International Finance Facility, which would raise extra aid money by leveraging capital markets and issuing bonds.

I hope the G8 will agree not only to a plan of action but also to its implementation, a process of monitoring and review. We all need to be accountable for carrying out the commitments we have made.

The changing climate

Africa, of course, is also seen by experts as particularly vulnerable to climate change. The size of its land-mass means that, in the middle of the continent, overall rises in temperature will be up to double the global rise, with increased risk of extreme droughts, floods and outbreaks of disease. It is estimated that African GDP could decline by up to 10% because of climate change.

But no country will escape its impact. And there can be no doubt that the world is getting warmer. Temperatures have already risen by 0.7°C over the past century, and the ten hottest years on record have all occurred since 1991. It's the fastest rise in temperatures in the northern hemisphere for a thousand years.

This temperature rise has meant a rise in sea level that, if it continues as predicted, will mean hundreds of millions of people increasingly at risk from flooding. And climate change means more than warmer weather: other extreme, increasingly unpredictable, weather events such as rainstorms and droughts will also have a heavy human and economic cost.

It is true, of course, that some scientists still contest the reasons for these changes. But it would be false to suggest that scientific opinion is equally split. It is not. The overwhelming view of experts is that climate change, to a greater or lesser extent, is man-made and, without action, will get worse. And as the evidence gets stronger by the day, the sceptics dwindle in number. From Arnold Schwarzenegger's California to China's Ningxia province, the

With a little more help, he can prosper

world is taking climate change seriously.

But just as technological progress and human activity have helped cause this problem, it is also within our power to lessen its impact and adapt to change. Science has alerted us to the dangers our planet faces and will help us meet these challenges.

But we need to act now. Delay will only increase the seriousness of the problems we need to reverse, and the economic disruption required to move to more renewable forms of energy and sustainable manufacturing in the future. And the G8, again, needs to lead: not just because we currently account for 47% of global CO_2 emissions, but also because it is our scientists, our industries and our economies that must help solve this problem.

Russian ratification of the Kyoto protocol means that we now have a new global treaty that is about to come into force. This is good news. But the level of change and ambition required will be far more than the Kyoto protocol is likely to provide. And with the United States, the world's largest emitter of greenhouse gases, refusing to sign up to the protocol, this makes the measures we could secure through the G8 even more vital.

Although the United States will not ratify Kyoto, other approaches, such as the McCain-Lieberman bill now going through Congress, could stand a better chance of support. Some American states and businesses are also already taking a lead on initiatives to reduce greenhouse emissions. New York has a state emissions-reductions target of 5% below 1990 by 2010 and 10% by 2020. California has a string of policies in train, including regulating carbon emissions from vehicles and increasing the amount of energy generated from renewable sources to 20% of electricity sold into the state by 2010.

The United States is also leading investment and research in the new low-carbon economy. It is not a choice, as some suppose, between economic prosperity and tackling climate change. It is technological advances and economic development that will provide the realistic solution. It is the firms and countries that lead the way in adapting to this challenge that will have the competitive advantage in the future.

In Britain our economy grew by 36% between 1990 and 2002 while greenhouse gas emissions fell by 15%. British Petroleum has set and achieved targets, such as reducing its greenhouse-gas emissions by 10% in just three years. To achieve this, the company introduced an emissions-trading scheme: it cost $20m to implement, yet saved it $650m over the three-year period.

Those companies that adapt early to the demands of a future low-carbon economy know they gain competitive advantage. So this is not just the right thing to do for the sake of the planet. It is the right thing to do commercially.

Why we should act

Advocates for action on climate change must confront three economic arguments. First, if the case is so clear, why not just leave it to business? To that point I would say it is precisely in this kind of long-term challenge, where there are demonstrable and potentially irreversible social effects, with returns accruing over periods beyond commercial discounting, that government must play a clear role.

Second, critics charge that government is picking new, untried technologies that may fail. Here I would say the approach of clever governments is not to pick technologies, but to establish conditions where innovation is supported and encouraged into the market-place.

Finally, some argue that there are more immediate problems. In some senses, they are right: over the next five years, for example, water pollution will cause more harm worldwide. It is wrong, however, to see these problems as mutually exclusive. Without a stable climate, addressing other environmental threats will be impossible, ensuring a future of more degraded water and land. Every year lost on tackling climate change will take us further along the path where the costs of action multiply. And I have never believed that simple discounting can be an adequate tool for potentially catastrophic outcomes 50 or more years ahead.

We are at a stage where the role of government and global policy must be to encourage the development and commercial viability of the new technologies that have the potential to mitigate the effects of climate change. There is no single "silver bullet" that will solve the problem, despite what some enthusiasts for nuclear or hydrogen power may tell you. But a whole range of technologies are either available now, or will become available, which, taken together, can make a huge difference.

I believe the G8 can take a global lead both in making the world aware of the scale of the problem and in proposing ways to tackle them. Through the G8, we have the opportunity to agree on what the most up-to-date investigations of climate change are telling us about the threat we face. We could also endeavour to identify and support the technological measures necessary to meet the threat, which would complement rather than undercut the Kyoto protocol. And the G8 must also engage actively with other countries with growing energy needs—such as China, India, Brazil and South Africa—to ensure that they meet their needs sustainably and adapt to the adverse effects of climate change, which seem inevitable.

Given the different positions of the G8 nations on this issue, such agreement will be a major advance. But I believe it is achievable and necessary.

I have no doubt that some may argue that aiming so high both on climate change and Africa is a hostage to fortune. I recall that fictional Whitehall mandarin, Sir Humphrey Appleby of "Yes, Prime Minister", describing such ambitions as "courageous" when he hoped to put Jim Hacker off a particular course of action. But I remain hopeful that we can succeed in these aims. It is vital for the world that we do. ■

The melting ice-caps: a global responsibility

GRU
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- **We will adhere to environmental laws, regulations and standards**
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- **We will communicate in a timely and effective manner with our customers and community about environmental issues**

To learn more about our environmental efforts, please make a selection from the menu on the left of your screen.

Submitted 1/24/05
040913 citizen comment

Good evening Madame Mayor and Commissioners, my name is Peter Rebmann. I'm here tonight representing a number of citizens groups and individuals. In particular, I am here as president of the Northwest Gainesville Coalition of Homeowners Associations and as spokesman for Citizens for Affordable and Renewable Energy.

My presentation is the first of several that will be made tonight by speakers representing and/or supporting Citizens for Affordable and Renewable Energy. We ask your indulgence to let our speakers make their presentations consecutively in order to expedite matters this evening.

As a result of several citizen meetings and discussions, we are here to present a proposed resolution and to ask you to take prompt action after due consideration. Your action to approve this resolution will go a long way to build confidence and support in the community for the ultimate choices made by the commission on the issue addressed by the resolution. The overriding priority, as always, should be to protect the health, safety, and welfare of the citizens of this community.

The resolution is as follows:

"The Gainesville City Commission shall appoint an independent panel of experts to develop viable options, with financial estimates, that incorporate extensive use of renewable resources, where possible, for the long term production of electricity by Gainesville Regional Utilities. The objective of these options shall be a long term reduction, rather than increase, in the consumption of fossil fuels by Gainesville Regional Utilities."

Madame Mayor, this concludes my presentation. I thank you and your fellow Commissioners for your time and your kind attention and I ask that a printed copy of my remarks be made part of the permanent record of this meeting.