

CLIMATE ADAPTATION FORUM: BRIDGING THE GAP

Julian Cribb FTSE

SLIDE 2 CHALLENGE

Climate adaptation could well be the largest science communication challenge in human history.

It involves obtaining the understanding, co-operation and behavioural change of 7 billion people, rising to 11 billion by the 2060s.

Nothing so large as attempting to adapt human behaviour and use of technology *universally* has ever been undertaken before.

While science and technology are vital in helping to achieve effective adaptation, they are less significant to the ultimate outcome – whether we adapt or not – than the decisions and actions of billions of individuals.

At present the world invests quite a lot in climate research, including technologies designed to prevent or adapt to it. However it is investing very little in the far larger task of

helping people in all societies across the globe to change their behaviour, their consumption patterns, their habits, their use of technology, their views, traditions and beliefs.

Without this essential element of communication, we will not achieve effective voluntary adaptation - and the outcome may well be Darwinian adaptation on a planetary scale.

SLIDE 3: SCENARIOS

To give an impression of what this means, take the three main climate scenarios – 2 degrees, 5 degrees, 10 degrees plus.

2 degrees, I gather, is already regarded as the most optimistic but least likely outcome.

The IEA projects we will burn *600 billion barrels of oil* in the next 20 years alone.ⁱ Weaning humanity off its addiction will not be accomplished without some very effective communication.

5 degrees remains feasible, given unprecedented worldwide co-operation and goodwill, and universal behavioural change.

10 degrees plus, involving total polar melting, sea level rises of ultimately 60-80 metres and runaway planetary heating, now appears a possibility.

For whichever of these circumstances we encounter, massive adaptation on the part of all humans – and indeed all living organisms and ecosystems – is inevitable, whether it is voluntary or involuntary.

To illustrate what is at stake I refer to a study by the US Centre for Strategic & International Studies called *The Age of Consequences* (2007) which explores the military and foreign affairs outcomes of these scenarios.ⁱⁱ

3. CLICK

For up to 2 degrees, it predicts “heightened internal and cross-border tensions caused by large-scale migrations; conflict sparked by resource scarcity, particularly in weak and failing states; increased disease proliferation, economic consequences; some geopolitical reordering as nations adjust to shifts in resources and prevalence of disease.”

3. CLICK

Above 2 degrees it expects: “The internal cohesion of nations will be under great stress, both as a result of a dramatic rise in migration and changes in agricultural patterns and water availability. The flooding of coastal communities around the world, has the potential to challenge regional and even national identities. Armed conflict between nations over resources... is likely and nuclear war is possible. The social consequences range from increased religious fervor to outright chaos. Climate change provokes a permanent shift in the relationship of humankind to nature.”

3. CLICK

For a 5 degrees and above scenario, it says “This catastrophic scenario would pose almost inconceivable challenges as human society struggled to adapt. It is by far the most difficult future to visualize without straining credulity....” It sees “rage at government’s inability to deal with the abrupt and unpredictable crises; ... a dramatic rise in millennial end-of-days cults; hostility and violence toward migrants and minority groups..... increased global migration; intra- and interstate conflict over resources, particularly food and fresh water...mass terrorism.”

SLIDE 4: FOOD

In my own assessment the most critical area for adaptation will be food. The best new crop varieties or farming technologies are no good unless they are conveyed, without delay, to 1.8 billion farmers worldwide *and are taken up by them*.

This is a communication challenge like no other. Even today, advanced farming methods are used by fewer than a quarter of the world's farmers. The issue is extremely rapid knowledge dissemination, and how best to do it using modern tools of mass communication. We need to reach nearly 2 billion people with the right advice. We've done it before, so we know it is possible – but never on such a scale.

This is an example of the global adaptations which are going to have to take place, and why communication is pivotal in achieving them.

SLIDE 5: CONSUMERS

As we approach these scenarios – and to avert the worst of them – almost universal behavioural change will be needed in the population in areas such as food, water use, health and

disease, energy use, housing, clothing, transport, recreation and above all, consumer choices.

For good or ill, consumers choices drive the global economy. Consumers drive climate change. And consumers will drive the extent to which civilisation can adapt to it.

But who will drive consumers? To change their habits involves reaching billions of people with the right advice, in a form they can act on.

To influence these choices across society the mass media is pivotal. In recent decades it has become obsessed with rubbish and trivia. It now has an opportunity to prove its value to humanity by disseminating urgently needed knowledge and advice about adaptation in order to protect our civilisation.

We may have the best possible climate adaptation policies and the best possible technologies – but they will achieve limited traction unless billions voluntarily change their way of life, adopt and adapt.

To do that, they have to know what to do, why and how, explained in terms they can understand, relate to and use in their daily lives and work.

Ninety per cent of all people in society gain 100 per cent of what they know about science and technology from the media. The media is the main way by which new science and technology usually reaches a mass audience.

The media holds the key to rapid society-wide change and adaptation. I believe it can be successfully influenced and challenged to do so. Like politicians, one thing the media fears above all others, is being out of step with society's changing views and values – and losing its audience.

Via the internet, free-to-air and cable TV, radio, newspapers, magazines, newsletters, mobile media, social networks and the like, the essential knowledge of what to do in order to adapt to changing climate, why to do it and how can be disseminated, in some cases, literally at the speed of light. If we work with the *right* media, starting with industry and specialist media, it is completely achievable.

Working out exactly what information and advice to disseminate and funding the effort are the main challenges.

A second element critical to effective climate adaptation is understanding how society is adapting, or failing to adapt, and finding out which people are resisting change and why.

We have to marry the advice on adaptation to the wishes and needs of the society, so as to secure the *fastest possible uptake*.

SLIDE 6: RtPM

To overcome this serious gap in our knowledge of what society thinks, my colleague Dr Nick Fisher and I have devised a technique known as “Reading the Public Mind”.ⁱⁱⁱ

This provides the first-ever moving picture of what the public thinks about a given scientific issue – *and why they think it*. It explains the deeper issues behind public opinion for or against a new piece of scientific advice or a technology, and how these shift over real time.

It enables those developing new policies or new technologies to understand how the public will receive them, whether or not they will be embraced, stalled – or totally rejected.

The essential issue in climate change is the speed at which it is happening.

The essential issue in adaptation is the speed at which it must occur.

We cannot afford to put out new climate policies, advice or technologies only to see them stalled or rejected by society simply because they do not meet its wishes. We have made that error with GM food and a score of other technologies.

We are not obliged to repeat it.

Humanity has adapted to extremes of climate before, mainly by communicating very effectively within our social groups and finding and sharing technical solutions. We can certainly do so again.

But let us not underestimate, for even a moment, the scale of the communication effort required of us this time – or the absolute urgency of the task.

The real task of communicating with seven billion people, including 22 million Australians with sound advice on what to do to adapt to climate change, should have begun yesterday.

SLIDE 8: DRY TIMES

ends

ⁱ Aleklett K, Economy and climate on the path down from the peak of oil and gas. ScienceAlert, Nov 2, 2009

ⁱⁱ US Centre for Strategic & International Studies, *The Age of Consequences* (2007)

ⁱⁱⁱ Fisher N, Peacock A and Cribb JHJ, Reading the Public Mind, Keynote paper, CRCA Conference, July 2009.