



Professor Penny D. Sackett
Chief Scientist for Australia

Communicating the Future: Climate Change Summit

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- Thankyou Dr Foley. It is a pleasure to be here today.
- Before I begin, I would like to acknowledge FASTS on behalf of all of us, for spearheading this summit to bring us together today, and all the individuals in a number of other organisations that I know helped along the way. It is a pleasure to see representatives from all walks of science, including the social sciences.
- Climate change communication is as much about human behaviour and interaction as it is about science, which is why it was so important to me that the social sciences be included in this summit. I think actually the best course of action is to engage experts who understand people, including how what is said is different to than what is heard.
- So today is an opportunity for discussion that is long overdue. In many ways, and I have said this before, there has been a great deal of miscommunication around climate change.
- The science has often been misinterpreted, the speed of some impacts of climate change have been exaggerated and the scientific process itself has been misconstrued.
- But we simply cannot shake our fists at the media. At times scientist have been involved in

each of these problems, either directly, or more passively through inaction.

- We are not here today to play the blame game. Nor are we here to concoct schemes to change people's minds or alter their behaviour through inflexible, one-way preaching.
- What we *do* want to do is determine the best way or possibly ways to present the essence of all climate change science, as we understand it today and its potential for grievous harm to our environment and our well-being. As ethical, responsible scientists and citizens we can do no less.
- There is a scientific consensus that climate change is happening and that human activity is the major contributor to the long-term change we will see and are seeing over many, many decades. The evidence is overwhelming. And in the scientific arena, these two facts are no longer an area for debate.
- This science is supported by oceanographers, physicists, chemists, mathematicians, biologists and geologists from all around the world.
- But in the broader society, debate continues.
- Public debate is healthy; it is vital part to democracy. But we need to help larger society

understand that scientific consensus exists on the major aspects of science and that while debate should continue, it should continue in the realm of policy, in the realm of business adaptation and in the realm of effective societal action. And where the science is still in need of refinement, progress will be made through the same established scientific methods and scientific discourse that has served humanity well in other areas of science.

- Unfortunately, in many cases, people confuse the scientific and the ideological, attacking science when their gripe is with policy.
- As such, we have a responsibility to encourage the public to think differently, to look at science communication critically, carefully considering the source, the content and the methods of delivering the messages they hear.
- Science is a discipline that inherently encourages scepticism. Scientific scepticism has as its goal building reliable knowledge, not distorting it or selectively ignoring the bulk of evidence.
- The scientific sceptic has the burden of not only criticising, not only expressing doubt, but building a better explanation so that the store of knowledge is increased.

- Science follows its own internal processes of scepticism. The process of peer review before publishing, continued challenging thereafter, ensures that the science continues to improve and that challengers are held to the same standards as proposers.
- Unfortunately many critics who gain considerable attention in the media do not have scientific expertise and their views do not undergo the same internal scrutiny.
- Scientists must jump through hoops before their work can be published, public critics do not. Scientists must do more than challenge; they must challenge and produce a better scientific explanation. Public critics need only cast stones.
- Is this something that the public understands? I'm not sure they do. But it is to their detriment if they do not. And so we have quite a bit of work to do.
- Today I would like us to focus on ways we can help the public be better informed to make their own decisions about appropriate climate change action, recognising that the decisions about their own personal actions are theirs alone to make, but that scientists have vital carefully tested evidence to inform those decisions.

- To do this, we need to recognise that there have been several communication failures – by scientists, by politicians, by journalists and by society more generally.
- I have four points to make in this regard. First, the use of labels to label people, labels such as ‘denialists’ or ‘warmist’ for that matter, is neither a legitimate nor an effective response to the problem at hand.
- Michael Fitzpatrick, a doctor and author who has extensive experience dealing with claims that vaccines are linked to autism, has written an article in *New Scientist* recently in which he argues that branding pseudoscience as a secular form of blasphemy is intolerant and ill-advised.
- Dismissing their claims reinforces cynicism about science and promotes distrust for scientific and medical authority.
- Engaging people who doubt well-established science is a perennial challenge and not just confined to climate change. There are people who challenge evolution or the causes of AIDS for example.
- Ignoring or attempting to silence or “out shout” them is not an option.

- Why? Well they might actually be right about something that would have been otherwise missed and if so we would have then just squashed a little bit of truth.
- On the other hand they might be wrong, but in the process of examining their claims we might discover more truth or learn how thinking and understanding can go wrong.
- The most active opponents to the reality of climate change often exhibit confirmation bias – a tendency to seek out and believe evidence that fits their preconceived ideals while dismissing the rest.
- But the best approach is to let them be heard, but also to seek appropriate and importantly – effective – avenues to present the full weight of the evidence.
- By labelling some people denialists, we only push them further away from us, creating a larger gap based on ideology, not science. No human being is one dimensional; denial is not the only thing that defines some of our fellow citizens. Labels cause, I believe, more harm than good by ignoring our common humanity.
- The second communication failure I want to address is the use of quotes such as “the science is settled” or “there is no more room for debate about science”.

- Make no doubt about it; there is a lot about climate change that scientists do not know yet.
- We do not yet know how the great ice sheets will move, how climate change will affect local weather patterns or whether the great oceans can continue to absorb carbon at their current rate.
- When we state that the science on climate change is complete, we leave ourselves open to ridicule and damage our credibility while some questions are currently unanswerable or when new information surfaces.
- It is crucial that in our key messages on climate change, we alert citizens to the degree of certainty of the most important conclusions – that global warming is happening, that our oceans are becoming more acidic and that human activity has played a large role, but we must also stress that some areas are not as certain and that is why they require more research.
- The third communication failure I want to address is the constant focus on the negative consequences of climate change.
- In recent discussions between my communications staff and an ABC radio journalist, we learned that the reporter believed

that initial climate change reporting was too much, too quickly and much too dramatic.

- In reporting before Copenhagen, when climate change stories were featured in the media almost daily, the focus of inaction was on disasters, on environmental destruction and on individual suffering.
- Though the public may have been alarmed, this sort of reporting could not be sustained in the long term. Dangerous climate change occurs over decades not days. When people failed to see negative impacts on their day to day lives, distrust grew, and the science lost credibility.
- At a meeting similar to this one, held at George Mason University in the United States, those attending concluded that the key messages about climate change needed to link the bad news about threats to society with the good news about opportunities for sustainable economic growth, evolving and new commercial markets linked to emerging job opportunities.
- In doing so, society is given a reason for concern, yes, but also hope, making them more inclined to accept and take action, knowing there are benefits beyond risk mitigation. Mitigating and adapting to climate change will not only decrease hardship, it will be a crucial step in creating a more modern future.

- The final area of communication failure that I'd like to mention is the failure to remember that communication is a two-way street. If we want to be heard, we need to listen. What are the questions the public most wants the answers to? Let's ask them. How would they like that information to be organised? Let's find out.
- To compensate for these communication errors, there is much that must be done.
- Of foremost importance to me is the need to empower individuals.
- In the current political climate, the public are receiving mixed messages.
- Scientists are in broad consensus on the major science points and many of its devastating consequences. But the failure to reach a resolution at Copenhagen and the shelving or slowing or gutting of climate change policies by governments and oppositions around the world has left the public disempowered and confused.
- Just as the group at George Mason University recommended, I too would like to take this opportunity to encourage each of us to promote more positive messages about climate change.
- We must communicate firmly and clearly, but we need not focus on doom, gloom and

disasters. This only alarms people and causes them to think the problem is so big that there is nothing they can do. Instead, messages about what is being done in our local communities, in our country and even internationally to combat climate change are better versed to empower people to take action.

- In the face of Copenhagen, and the ups and downs of our own national climate change strategies, the public needs to hear about communities that are taking action. They need to hear that around the world, people are making a difference.
- For example, over the past thirty years, Denmark has gone from being fully dependent on external energy to becoming a net energy exporter. Its GDP has grown by 70% over this period with almost NO increase in its total energy use. At the same time, its CO₂ emissions have dropped by 18%.
- California increased its solar and wind energy capacity by nearly a factor of five between 2007 and 2008 alone, for a total of 516 Megawatts.
- And a total of 944 cities in the United States have individually indicated that they support the Kyoto protocol, and many are developing plans

to monitor and restrict their own emissions.
They are not waiting for state or federal action.

- In local communities in San Francisco California, individuals are tracking and comparing their individual greenhouse gas outputs on a social media website, *Cool Climate*, which operates in a similar fashion to facebook.
- These are the sorts of stories that the public need to hear. Change is possible, others are taking action, individuals do have the power to make a difference. Indeed as each individual Australian has two of the largest carbon feet in the world, the steps that we take can effect more change than that possible by individual citizens of any other country.
- The same George Mason group recommended the creation of a concise, factual framework to help people weigh the pros and cons of various policy options.
- This is not a job for scientists alone, but it is one with which, I believe, scientists must engage. Why would we not? Why would we leave a vacuum?
- By educating the public on what our environment as well as our business and local communities need from good policy, the public

is more likely to be better informed and exercise their political power individually and en masse.

- Generating a sense of empowerment requires, but I think will also assist in growing a scientifically engaged Australia.
- By this, I mean a society that is inspired by and values scientific endeavour. A society that understands, enjoys and importantly, respects the processes of scientific enquiry.
- Full implementation of this is beyond the realm of climate change communication alone, but in communicating the science clearly and simply, people are more able to critique arguments against climate change and make meaningful decisions about their own activities. They will be able to directly see the value in their own lives of good and well-communicated science.
- Climate change is such a difficult issue to communicate because it sits at the cross roads of science, government, business and society. But by engaging the public in a positive matter, by listening to them and by empowering them I believe we can make a difference.
- This summit is an opportunity for all us to discuss how to empower the public, what action we need to take to develop a scientifically engaged society, and how to help

our fellow citizens understand the difference between scientific and ideological debates.

- Climate change communication has had failings in the past. With an new election ahead in Australia, and progress around the world in greenhouse reduction activities, now is the time to turn that around and to make a difference that will last generations.
- Thank you, I am now happy to take any questions.