

Climate Change

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Thank you Peter. I want to thank you all for coming out to discuss warming on such a cold night, and I also want to thank Bob for his introduction to the series and Graeme and Robyn for such engaging presentations.

As I have worked on World Vision's climate change policy over the past year; as the awful implications of unfettered climate change for the poor and for Australia have sunk in; and as I have prepared this talk, I realised that merely outlining the projections for developing countries tonight and pleading that "we must do more" is just not adequate. I will do that of course. But it is not enough.

The situation is too grave to mince words. The stakes are too high to pretend that we are not facing a potential crisis on climate policy in this country. It is not possible to be politically neutral on so great and terrible a subject as climate change. But then again, it is not World Vision's role to be neutral. As a Christian agency we are bound by a sacred duty to stand with the poor and with the marginalised – and most importantly, to stand with today's voiceless children; children who have no vote; children who have a right to hope; children who will grow up astonished at our self-indulgence if we do not rise to the challenge that climate change has laid out before us.

So - let me begin by emphasizing that climate change is fundamentally a development problem, not simply an environmental problem. The environmental costs of greenhouse gas pollution have not been incorporated into the prices we have paid for coal, oil and gas for the last 200 years. We now have to correct that mistake. We now have to take account of the very real costs of greenhouse gas emissions. Rather than cursing the imposition of higher prices, we should instead be thankful that for so long we have been subsidised – subsidised by the forests, the atmosphere and the oceans. Our Earth absorbed so much of our waste for so long, but now it is gagging, choking on our effluent. Like all unsustainable, market-distorting subsidies, our failure to pay the true costs of our emissions had to come to an end.

For well over a century people did not realize the damage they were causing, so we cannot fault our forebears. But the writing has been on the wall for all to see for almost 20 years:

In May 1990 the Intergovernmental Panel on Climate Change, the IPCC, its First Assessment Report, stressed the need for, and I quote, "immediate reductions in emissions from human activities of over 60 per cent to stabilise their concentrations at today's levels" end quote.¹ This warning was issued in 1990 – 18 years ago. Yet now our big industrial emitters and their financial backers are demanding compensation, as though the need for emissions reductions had startled them, leaping out suddenly like a jack-in-the-box. The

¹ George (1992), p. 5, quoting Houghton *et al.* (1990).

reality was more slow-moving, more like a slug-in-a-box: unpleasant – certainly, inconvenient – definitely, but hardly emerging fast enough to be startling.

The evidence on climate change has been there, growing steadily for almost 20 years, and any corporate executive doing proper due diligence and scenario planning could have understood the implications. Unfortunately many fell victim to a well-financed and deliberate campaign of distortion, doubt and denial. Some, it must be said, fell victim willingly. It was the novelist Upton Sinclair who once quipped: “It is difficult to get a man to understand something when his salary depends upon his not understanding it.”

By late 1995, in its Second Assessment Report the IPCC was even more adamant, concluding that “the balance of evidence suggests that there is a discernible human influence on global climate”.²

This statement 13 years ago, rang alarm bells in Europe and many European governments responded accordingly. By contrast, in Australia, our previous government channeled its energies into making sure Australia *didn't* pull its weight under the Kyoto Protocol. After achieving a spectacular own-goal in the Kyoto negotiations, it put on its comfortable slippers and relaxed by the warm glow of coal-fired power stations for the next decade. Now we are paying the price. Now we have to work harder, to try to claw back some of that lost time. Now we have no time for delays. As Professor Garnaut said in his recent draft report, “The good options on mitigation will soon be gone.” (p. 9)

Last year, the IPCC submitted its Fourth Assessment Report, declaring ‘Warming of the climate is unequivocal’. It noted that global temperatures have increased by about 0.8°C since pre-industrialised times and that we have about another 0.6°C of warming already in the pipeline from emissions we’ve already put out there.³

Future emissions therefore guarantee that we are likely to come very close to 2°C of warming, unless emissions are drastically reduced.

But why should 2°C become the temperature we focus on? Certainly not because it’s ‘safe’. Not at all. There are very serious consequences for even 2°C of warming. But 2°C is generally acknowledged as about the lowest we can hope for, given that the overwhelming momentum of the international economic system is currently on track to send us well beyond this temperature.⁴ There is widespread agreement that the consequences of more than 2°C are just too awful to contemplate. In 2007 the European Commission drew a line in the sand, recommending that the EU adopt policies to avoid this 2°C threshold.⁵

What does that 2°C temperature target imply for emissions targets? The IPCC’s best estimate is that to prevent warming above 2°C, the rich countries must reduce their emissions by 25-40% below 1990 levels by 2020 and by 80-95% below 1990 levels by 2050.⁶

²Kerr (1995), p. 1565.

³ IPCC (2007a), p. 5, (2007b), p. 19.

⁴ Raupach *et al.* (2007).

⁵ European Commission (2007).

⁶ Gupta *et al.* (2007), Box 13.7, p. 776.

At the moment, the debate in Australia does not give due weight to what particular emissions targets imply for warming temperatures, or what the consequences of those temperatures are. You may have noted that the Government's current policy of 60% reductions in Australia's emissions below 2000 levels by 2050 falls well short of what's required of rich countries to keep warming close to 2°C.

The government's current target is a good start, but it is not enough. If adopted by all the rich countries, it would bring us warming of around 3°C.

What would a 3°C *increase* in temperature mean? And what does it imply for developing countries and for geopolitical stability?

Well for one thing, there are staggering risks in imagining that we can simply weigh up the costs and benefits and target a particular temperature *above* 2°C, like as 3°C, as being more 'practical', more 'sensible', more 'economically responsible'. Such an approach is naïve. The Earth's climate is not so simple a system that we could presume to be able to coast to a 'soft landing' at a temperature of our choosing. Instead it is a highly complex nonlinear system with interacting dynamic feedback paths and critical thresholds. One of the most significant dangers of crossing the 2°C threshold is that we will unleash an avalanche of self-reinforcing processes that guarantee that we reach much higher temperatures and much higher sea-levels no matter what we try to do. In other words, 2.5°C of warming may lead inexorably to 3°C, 4°C, 5°C, and even 6°C as rainforests dry out and burn, Arctic ice disappears allowing the Arctic ocean to absorb more and more heat, and the tundras of northern Russia and Canada thaw out, releasing millions of tonnes of CO₂ and methane.

I find it astonishing, as an economist, that such reckless radicalism is permitted to march brazenly, unchallenged, under the banners of conservatism and economic responsibility.

What does all this mean for developing countries?

The poor are currently suffering and will continue to suffer the most from climate change. They are least able to protect themselves from its effects and they are least able to recover from climatic disasters. They tend to live in the most vulnerable areas, such as low-lying land prone to flooding, or marginal agricultural land prone to drought. They are the most vulnerable to the spread of tropical diseases. They are more likely to have to leave their homes in search of water or to escape flooding. They are the most vulnerable to the effects of the conflicts likely to arise from tensions over water, energy and displaced people.

Women and children in particular are highly vulnerable. There are critical gender dimensions to climate change that are too often forgotten – women do most of the water fetching in poor countries, women do most of the agricultural labour, women do most of the fuel wood gathering. The burden on poor women is likely to increase substantially.

What are some of the projections for developing countries? Let me simply read some quotes from last year's IPCC reports – and as I do, try not to let this just wash over you. See their faces. Hear their voices. Imagine yourself in their place.

So what did the IPCC say? It said:

- Drought-affected areas will likely increase in extent.
- Heavy precipitation events, which are very likely to increase in frequency, will augment flood risk.
- Many millions more people are projected to be flooded every year due to sea-level rise by the 2080s.
- In Africa: By 2020, between 75 and 250 million people are projected to be exposed to an increase of water stress due to climate change. ... Agricultural production, including access to food, in many African countries ... is projected to be severely compromised In some countries, yields from rain-fed agriculture could be reduced by up to 50% by 2020.
- In Asia: Glacier melt in the Himalayas is projected to increase flooding, and rock avalanches from destabilized slopes, and to affect water resources within the next two to three decades. This will be followed by decreased river flows as the glaciers recede. ... Freshwater availability in Central, South, East and Southeast Asia, ... is projected to decrease due to climate change which ... could adversely affect more than a billion people by the 2050s. ... It is projected that crop yields could increase up to 20% in East and Southeast Asia while they could decrease up to 30% in Central and South Asia by the mid-21st century.
- Small islands are of course especially vulnerable to the effects of climate change, sea level rise and extreme events.

It is worth pausing to consider the IPCC's projections for Asia in particular. The humanitarian and security implications of widespread water shortages across Turkey, Israel, Iraq, Iran, Pakistan, Afghanistan, Northern India and Western China are enormous and the costs are likely to be staggering. Widespread water and food shortages would trigger large movements of people and, if history is any guide, major armed conflicts.

In short, climate change will exacerbate poverty and will act as a 'threat multiplier' greatly increasing the risk of conflict. If climate change continues as the IPCC has projected, hundreds of millions of poor men, women and vulnerable children will suffer.

Viewed in this light, strong action now to rein in climate change is not the 'net cost' it is so often made out to be. Sure, it will have upfront costs – but so does any investment. Responding *inadequately* to the threat of climate change virtually guarantees that our economy and our society will take a far larger hit in the future from the consequences of climate change and the conflicts it is likely to unleash.

We can summarize our situation in four points:

First, we are currently on a totally unsustainable path that will have horrific repercussions for both poor and rich countries if it is allowed to continue. In other words, we are facing a global emergency, the likes of which we have never before seen.

Second, we need to restrict warming as much as possible, and 2°C is generally acknowledged as a threshold we should not cross. Any proposed targets should be judged primarily by the temperatures they imply, and the consequences of those temperatures, if other countries were to adopt similar targets.

Third, massive reductions in emissions are required to achieve this goal – including substantial absolute reductions from rich countries, and for poor countries, significant reductions below what their business-as-usual path would have been.

But fourth – there are grounds for *hope*. The IPCC’s long-range projections are *projections* of what is likely to happen if trends continue as they currently are. They are not *predictions* of what *will* happen. We do not have to choose that future. We can choose a different future. There is still time – not much, but we have a window; a window of opportunity; a window of hope, a window through which we can imagine a different future. We must not give in to despair and cynicism – that is the easy and lazy option. The situation is too dire for despair. We must choose to hope. Because while hope, we look for solutions. And the solutions are there. We *can* choose a different future from these doom and gloom scenarios.

So how should Australia respond to this diabolical predicament? What should Australia do to ensure that that window of hope remains open?

What question should we start with? Should we start with the questions ‘What can the economy cope with? What will cause us least inconvenience?’ or should we start instead with the question ‘What is needed to avoid disaster and how can we make it happen?’

We should consider, I think, the timidity with which mitigation measures are discussed today to deal with a planetary emergency, compared with the rapid general mobilisation a previous generation undertook to defeat fascism during the Second World War.⁷

Earlier generations understood that the so-called ‘national interest’ could not be defined as getting the best short-term deal for Australia. Earlier generations understood that our national interest was affected by events overseas. That earlier generation understood the fragility of freedom.

Thankfully, they could read the writing on the wall. Thankfully, they recognized the scale of the threat and mobilized against it.

We owe our freedom to a previous generation who sacrificed their very lives to ensure that we did not have to grow up under a fascist dictatorship.

What will our children and grandchildren think of our generation if we respond to this emergency by trying to ensure that we were not inconvenienced; if we respond by trying to ensure that we do not have to make any sacrifices – and as a result leave our children and grandchildren a legacy of dust and ashes?

Our generation faces a stark choice: to keep our heads in the sand, hoping for the best, or to recognise the scale of the threat facing us and to mobilise against it.

Perhaps climate change *will* require that we make sacrifices and major investments, just like previous generations made when facing another dire threat. To meet this challenge, we should not be thinking merely in terms of tinkering around the edges of economic policy –

⁷ Walker (1944).

but rather calling for another General Mobilisation. The economics of wartime are different from the business-as-usual economics of peacetime – better market signals are of course needed, but alone they are not enough. A General Mobilisation requires governments to take the threat seriously, to show leadership in communicating what needs to be done, and to make tough decisions about how to achieve it.

In February this year, the über-capitalist consulting firm McKinsey & Company, not exactly a hippy drum circle, released a report entitled *An Australian Cost Curve for Greenhouse Gas Reduction* showing that Australia could achieve 30% reductions in its greenhouse gas emissions below 1990 levels by 2020, and 60% below 1990 levels by 2030 – without any significant lifestyle sacrifices, technological breakthroughs or massive investments in public transport.⁸ More recently Greenpeace's *Energy Revolution* report showed that emissions from Australia's energy systems could be reduced by 37% by 2020.⁹

What would be possible if we took the climate change emergency and the dire threat it poses to the world's poor seriously and demanded a General Mobilisation? What if we *did* make some sacrifices? What if we *did* undertake massive investments in public transport - *before* the rest of the world catches on and the prices for buses, trains and engineers go through the roof? What if we invested hugely in solar, geothermal and wind generation, positioning Australian industries to surf the wave of global refitting in the 2020s and 2030s? Could we achieve 40% reductions in our emissions by 2020 under a General Mobilisation? Maybe. Do we have any excuse that we could explain to our grandchildren why we should not try?

To those beating the drum of Australia's 'national interest', indulging in the reckless radicalism of pressing for delayed action and weak targets, I would ask:

- How is it in Australia's national interest to lose more than 90% of the agriculture in the Murray-Darling basin?
- How is it in our national interest to lose the wondrous wetlands of Kakadu?
- How is it in our national interest to lose hundreds of kilometers of golden beaches to rising seas?
- How is it in our national interest to see rural communities in southern Australia decimated by near permanent droughts?
- How is it in our national interest to idly permit the destruction of that glittering jewel in the crown of the world's natural heritage, the Great Barrier Reef,?
- How indeed is it in our national interest to even contemplate the geopolitical disaster of a billion people short of water and hundreds of millions short of food and displaced by rising seas? Do we imagine for a moment that Australia would not be affected by such global upheaval?

Across the world, our homes are already on fire. Flames are flickering at the treasures we'd planned to pass on to our children. And yet still, some stamp their feet and say, "We're not going to hose down our house until the neighbours hose down theirs." Is it just me or is it madness to allow Australia's fate to be determined by the whims of foreign powers? Because that's what they're saying isn't it? "We will allow China and India to determine when we take action to rein in our emissions."

⁸ McKinsey & Company (2008).

⁹ Teske & Vincent (2008).

Let me conclude by asking, “What kind of leaders do we need?”

We need leaders who can read the writing on the wall; leaders who appreciate the scale of the threat we are facing from climate change; leaders who understand that Australia’s national interests are not well served by international upheaval; We need leaders who understand that the global transformation to more low-carbon economies presents enormous opportunities for Australia if we are ahead of the pack.

We need leaders who see this global emergency as the greatest challenge of our generation, not as an opportunity to score cheap political points. We do not need leaders who underestimate the Australian people, who pander to our natural predispositions to focus on ourselves in the hope that it will breathe life into their failing political careers.

We need leaders who can draw out the best in the Australian people, who can challenge us to see beyond our day to day concerns; leaders who are prepared to take the risk of leading.

The agreement that is hammered out in Copenhagen next December will govern the critical period between 2013 and the 2020s – the period when global emissions must peak and start to decline. The next 17 months leading up to that conference in Copenhagen will therefore to a large extent determine Australia’s future – the future of our agriculture, the future of our tourism, the future of our national security and indeed the future of our economy and society. Our stance in these negotiations will determine the legacy we leave to our children, and to millions of poor people.

Australia has a chance, this one chance, to play a pivotal role in world history. Australia can help break the log jam in the international negotiations. In his address in Bali, the Prime Minister spoke of wanting to position Australia as a bridge between developed and developing countries. We could be that bridge. We could help show the big developing countries that the rich countries are serious. We could adopt strong, binding emissions targets and put some serious money on the table to help them both to adapt to climate change and to reduce their own emissions. AusAID’s role will be crucial. It is not going to happen without leadership. We in the rich world caused this problem. It is we who have to move first. It is we who must move without delay. If we do, we can help break the logjam; we can keep open that window of hope. We *can* have a secure, prosperous and sustainable future.

Do we have leaders of that calibre? Do we have a nation, a generation, prepared to rise to this great challenge? We did once – and we owe them our freedom. I am quietly optimistic that once again we do have what it takes. But we will find out soon enough.

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