

Mists envelop our understanding of climate dynamics

What will happen if global production and consumption remain largely unconstrained by controls to minimize the effects on the Earth's complex climate system?

Prospects for concluding an effective international accord in Mexico in less than two months' time remain clouded. Modest progress at the latest round of United Nations climate talks that ended in Tianjin this weekend was overshadowed by continuing deadlock between China and United States, the world's two biggest greenhouse gas polluters.

As the Australian Government continues to dither over climate change, policymakers running economies and executives in charge of companies want greater clarity from scientists about the implications of the rise in temperature near the surface of the land and sea.

Some aspects of climate change are well established. Measurements show that the average temperature has increased by about 0.8 degrees since 1850. In the same period, concentrations of global warming

The harder we look at global warming, the more gaps we discover in our knowledge, **MICHAEL RICHARDSON** writes

gases in the atmosphere have risen sharply. The Intergovernmental Panel on Climate Change, the group of international scientists and officials advising the UN and member states on global warming and its likely effects, focuses on a small group of well-known greenhouse gases, including carbon dioxide, methane, nitrous oxide, ozone and several types of industrial fluorinated gases. The panel concluded in 2007 that most of the temperature increase since the mid-20th century was very likely due to higher global warming gas concentrations from human activity, mainly burning fossil fuels and clearing forests for agriculture.

The panel estimated that if current patterns of energy-intensive economic growth continued, the temperature would be between 2.5 and 4.7 degrees higher by 2100, compared with pre-industrial levels. As a result, it predicted a series of mainly adverse consequences as the world became hotter.

While there is no retreat among mainstream climate scientists from the panel's main findings, there is a new emphasis on the uncertainties involved. This is partly due to recent criticism of the panel, which shared the Nobel Peace Prize in 2007 with former US vice-president Al Gore for its efforts to spread knowledge about man-made climate change.

However, a handful of mistakes in the 2007 report of over 3000 pages have come to light in the past year, and the leak of emails from some scientists associated with its work suggested there might have been manipulation to create greater certainty than evidence warranted.

From the start of the panel's assessment work in the 1980s, it has had to strike a balance between conveying complexity and providing decision-makers and the public with clear analysis and conclusions.

A critical review in August by the council representing a group of national academies of science noted that the panel's 2007 report tended to

emphasise the negative effects of climate change, many of which were unsupported sufficiently in the literature, not put into perspective, or not expressed clearly.

Climate science has advanced markedly over the past 20 years. There are many reasons for this. They include improved measurements, especially from satellites and from ice cores that contain climate history stretching back at least 800,000 years. Increased computer power is being used to simulate past climate and project future changes.

Yet the more scientists learn about the climate and how it behaves, the more surprises and uncertainties they discover. In a paper published this month, researchers reached the counter-intuitive conclusion that the sun might warm the Earth more during waning solar cycles and that this could help to explain recent cold winters in Europe and North America even as the average global temperature increased.

This does not undermine the case

for man-made global warming. Some sceptics argue that solar activity is heating the Earth. The average amount of radiation from the sun has risen slightly in the past 150 years. But scientists say that the increase is only about one tenth of the warming effect of greenhouse gas emissions.

Still, the head of climate analysis at the US National Centre for Atmospheric Research, Kevin Trenberth, wrote in January that although our knowledge of certain factors responsible for climate change does increase, so does our understanding of factors we previously did not account for or even recognise. Among them is the role of clouds. Solar radiation and clouds strongly influence both short-term weather and longer-term climate. For example, low, thick clouds reflect the sun's rays back into space, causing cooling. High clouds, especially thin cirrus, trap outgoing infrared radiation, producing the greenhouse effect.

Yet science has so far been unable

to work out whether temperature rise will alter cloud formation in a way that amplifies or moderates warming, and by how much.

There is similar uncertainty about the role of tiny but prolific aerosol particles in the atmosphere. Aerosols, including black carbon, come from both human activities (mainly incomplete burning of fossil fuels, wood and other vegetation) and natural sources (mainly dust storms). Aerosols absorb and emit heat, reflect light and, depending on their properties, can either cool or warm the atmosphere. They also have the potential to determine the properties of clouds. The Royal Society, Britain's national academy of science, says that current understanding of the aerosol effect on climate is poor. There are also gaps in knowledge about the behaviour of ice sheets in Greenland and Antarctica, ocean circulation, and the way carbon dioxide and organic carbon move between the atmosphere, land and sea.

The next panel report is due in 2013. Will it be less definitive than the controversial 2007 report?

The Royal Society's short guide to the science of climate change, published last month, notes that researchers are focused on remaining uncertainties and that some may start to be resolved.

But others are unlikely ever to be significantly reduced and there remains the possibility that hitherto unknown aspects of the climate and climate change could emerge and lead to significant modifications in our understanding.

This will not be welcome news for those who want clarity from climate science. Of course, uncertainty can work both ways, since the changes and their effects may be either smaller or larger than those currently projected by the panel.

Like many important decisions, it seems that policy choices about climate change must continue to be made on the basis of incomplete information.

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Pollies chatter, soldiers die

As circumstances on the ground are changing, it's time for a wide-ranging debate about our commitment in Afghanistan



Finally, almost a decade after our troops first set foot in Afghanistan, the Australian Parliament is ready to debate their mission. Not today, though. There are, apparently, other issues that the honourable members feel are more important.

Think about this as you listen to the cat-calls, insults and witticisms being traded across the floor during question time. Consider the diggers on patrol in Oruzgan as you watch a Government and Opposition so full of their own importance they cannot be bothered to explain why they're asking our soldiers to die. Then think of each MP pocketing their travelling allowances and their puffed-up importance as they pretend they're actually formulating policy, when the reality is many of them don't have a clue what our diggers are trying to do, how or why they're fighting, in this interminable war that just won't go away.

The hypocrisy is breathtaking. It seems only fair that, as we wait for the next body-bag to come home, the politicians should be persuaded to take a moment out of their hectic schedules to explain why we're in Afghanistan. Because – no matter how good the justification for our mission in 2001 – so much has changed that there's an urgent need to redefine what we are attempting to achieve and the way we're doing it.

That's why the Greens are to be commended for finally forcing the debate: but this doesn't necessarily mean they're right and that we need to pull out our forces straight away. The difficulty Gillard's Government faces is that events are changing the situation dramatically. If Kevin Rudd had been prepared to allow a debate back in 2008 there wouldn't have been an argument. It seemed back then as if Hamid Karzai's Government was worth supporting and the way we were doing it was appropriate. Today both of those preconditions have collapsed. The fraudulent rulers of Kabul have



been revealed in the full splendour of hideous corruption and, perhaps more importantly, the bankruptcy and failure of our strategy is readily apparent. Last week the *Wall Street Journal* revealed a classified White House assessment that asserts the war is lost.

Let's deal with Karzai first. Many people will rightly feel that Julia Gillard sullied herself when she shook his hand – and yet that doesn't mean that he doesn't deserve our support. The Afghan President is attempting, with all the pathetic broken tools that are available, to create some sort of viable state. Changing the culture is difficult. In Kabul, concerns about corruption and repression are quickly relegated to secondary issues. Karzai's not nurturing some

sort of democratic nirvana, he's trying to survive. That's why he's desperately negotiating with the Taliban so he can do a deal that will leave him alive when the US begins to pull out in a little over a year's time. If he can preserve a semblance of progress, so much the better. Although seriously flawed, he remains the best hope the country has. But that doesn't mean preserving him in power is worth the life of another digger.

Instead, it's worth revisiting Australia's initial objectives in getting involved in Afghanistan and, particularly, the strategy adopted to accomplish the task. Some four years ago we took on specific responsibility for Oruzgan, while other NATO allies "adopted" other provinces. The idea was to divide up the country and prevent

the insurgency blooming. Unfortunately, this didn't happen. For whatever reason – and it's pointless to blame anyone – the Taliban are now flourishing everywhere. As a result our aim, to retain the area and train up Afghan forces to take over, is now irrelevant. The resistance is succeeding elsewhere. Nothing that happens in Oruzgan will change that. Our troops simply provide targets for the bomb-makers each time they go outside the wire. The enemy controls large swathes of countryside. The Kandaks (the indigenous battalions that our forces are training) barely function as effective military units in the sense that we understand the term.

On the other hand the US surge has put the insurgency under

enough pressure to force disparate groups to enter into negotiations with Karzai. To maintain the pretence that we've "won", it's been suggested that these talks are with the so-called "moderate elements" of the Taliban who have been forced to the table because they're close to collapse. That's rubbish. The truth is the American's have realised that they cannot beat the guerrillas. They never did, even back in 2001. At that time it was an alliance of Afghans, aided by US airpower and special forces, that toppled the regime in the capital. Gradually that coalition fell apart, and that's why the insurgency has gained support as the Taliban returned. The Americans are now attempting to talk their way out of the war, talking to some of the same people

who once hosted Osama bin Laden and destroyed the 2000-year-old Bamiyan buddhas. It may go against the grain, but it's the only way out of the quagmire.

We can dismiss the Opposition's attempt to beef up our presence on the ground with tanks, but not for the reasons advanced by the Government. More soldiers, artillery and our own support arms are required. A minor surge would demonstrate to the Taliban that we're serious . . . but the guerrillas would simply go elsewhere and the crumbling would continue around us. Nothing would be achieved, because the demonstration of our determination would have come too late. As well as that, even if we deployed our own artillery and armour, the reality is that it isn't nearly as good as the Dutch 155mm self-propelled howitzer or the US M1A2 Abrams fielded by our allies.

This doesn't necessarily mean we should continue on our current track. Former defence minister John Faulkner advanced three reasons explaining why we are in Afghanistan. The first was to boot al-Qaeda out of the country, and this was achieved. The terrorists are now operating from firm bases elsewhere in the Middle East. The second was to support Karzai. But this doesn't necessarily mandate the operational task of defending Oruzgan and it isn't worth the cost in Australian lives. Our patrols simply give a reason for the Taliban to arm their improvised explosive devices. If we weren't there, they wouldn't lay the bombs. Our tactics are wrong. They achieve nothing. We don't have to fight this way. Other, excellent strategies for success are currently being proposed by younger officers at Russell Hill. If the forces aren't providing these options to the Government, perhaps the current hierarchy should move on. Quickly.

The third reason Faulkner gave was to support the US alliance. This was a surprisingly poor choice of words. What the (then) minister meant was that we have a responsibility to support our own democratic ideals and hopes. These mesh with those of America. Our interests are intimately conjoined. Let's have a proper debate, now, where these issues can be thrashed out. And no more platitudes about how things are "about right", either.

The reality is an utter disaster.

Alliance lacks teeth and vision

DHANANJAYAN SRISKANDARAJAH

On the weekend, Britain's *Guardian* newspaper reported allegations that the Commonwealth secretariat had abandoned its commitment to defend human rights. This report could not have come at a worse time. Bad press around the Delhi games had already led to questions about what the Commonwealth is for these days, and this news potentially undermines the very thing that sets the association apart.

If the Commonwealth is to survive in the 21st century, it needs to show that it stands for something more than its ties to the old empire. The obvious choice, reaffirmed most recently when leaders met late last year, is a commitment to "fundamental values and principles" around human rights and democracy. Putting these lofty ideals into practice may be difficult given the diversity of the association – which covers Australia to Zambia – but if its leadership is not seen as a credible custodian of these values then the rest of the Commonwealth project will suffer.

Unlike most other multilateral groupings, the Commonwealth is rooted in a long history and buttressed by unrivalled civil society and business networks. There is no Royal "Organisation for Economic Cooperation and Development" Society, nor a Group of 20 Parliamentary Association. This gives the Commonwealth a huge advantage.

But it also means that its institutions have a harder time carving out a role for themselves. With a total budget less than 1 per cent of Britain's Department for International Development, and fewer staff than Cornwall council's fire and rescue service, the secretariat is unlikely to find places that could add real value. It could be a convenor, bringing together diverse experiences and expertise from around the world, but without an over-arching purpose it risks descending into a series of expensive talkshops.

The Commonwealth's role as a custodian and champion of values, therefore, is its unique selling point and the area where it has been strongest in previous decades. No other body boasts a global membership of countries that have voluntarily signed up to such strong ideals. Nor does any other have a mechanism for self-regulation like the Commonwealth's ministerial action group, which has the power to suspend, and expel, recalcitrant members.

The Commonwealth played a key role in the global campaign to end apartheid in South Africa and it pioneered independent international election-observer missions, many of which criticised practices in member states. But the organisation has been woefully quiet in these areas recently. The Gambian president has threatened journalists and human rights activists without any criticism from the secretariat; no statement was made on the sentencing of a gay couple in Malawi earlier this year; and it took almost three years after the coup for Fiji to be finally suspended late last year. Though we are told that work is being done behind the scenes, public silence hurts the association's credibility.

Just as the world is crying out for a credible moral authority, the Commonwealth has become shy and retiring. The fact that the association is governed by consensus is a unique strength, giving all its members an equal stake and preventing the kind of politicised deadlock that so often cripples the UN Security Council. But the consensus ideal has recently become an obsession, locking the Commonwealth into being as conservative as its most conservative member, many of which are reluctant to sanction criticism due to their own less-than-perfect records.

By contrast, the UN High Commissioner for Refugees campaigns tirelessly on international protection; and just last month the European Commission warned France over its treatment of the Roma.

The problem for the Commonwealth is as much philosophical as political. The fear of being branded neo-imperialist seems to have made it reluctant to push too hard on human rights. Yet, given that its members have freely subscribed to these ideals, holding them to account on their promises is hardly imposing western liberalism.

If the Commonwealth is to recover from its recent battering, it must make good on its promise of being an association that holds to its values. This means lending a helping hand where appropriate but also pointing a finger where there are serious shortcomings. The founding fathers had visionary ideals. Nehru had hoped that the modern Commonwealth would bring "a touch of healing" to the world. Today, it's the Commonwealth that needs an urgent dose of courage and ambition.

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Gillard must take tough line on Liu's jailing

Anxiety over an adverse Chinese reaction is misplaced, **CHRIS MICHAELSON** says

On Friday, the Chinese writer Liu Xiaobo was awarded the Nobel Peace Prize for his long and non-violent struggle for fundamental human rights in China. However, there is still no word from the laureate himself and it is unclear whether he is even aware of his achievement.

Liu continues to be imprisoned in China on charges of "incitement to subversion of state power" and "spreading rumours defaming the Government" for signing Charter 08, a declaration calling for political reforms and human rights. His trial on 23 December 2009 lasted three hours and his 11-year sentence was handed down two days later.

Liu's imprisonment was part of a wider crackdown which began in the lead-up to the 2008 Beijing Olympics. Since then, the Chinese Government has imposed long prison sentences on high-profile dissidents on baseless state secrets or "subversion" charges, expanded restrictions on media and internet freedom, and tightened controls

on lawyers, human-rights defenders and non-governmental organisations. Since early 2007, Beijing has also broadened controls on Uighurs and Tibetans. Arbitrary detentions and enforced disappearances have risen both in Xinjiang Uighur and Tibet Autonomous Regions, and the practice of detaining people unlawfully in secret facilities known as "black jails" has continued.

It is thus no surprise that the Chinese Government is furious about the Nobel decision. China's Deputy Foreign Minister, Fu Ying, had warned earlier that such a move would "pull the wrong strings" in relations between Norway and China, and be regarded as "an unfriendly act". Indeed, immediately after the Nobel announcement, the Chinese Government summoned Norway's ambassador in protest and denounced Liu as a "common

criminal". Meanwhile, Chinese police rounded up dozens of people who were celebrating Liu's achievement.

World leaders, on the other hand, have praised the brave decision of the independent Nobel committee. US President Obama and other leaders, including German Chancellor Angela Merkel and French Foreign Minister Bernard Kouchner, immediately issued strong statements calling for Liu's unconditional release. In Canberra, however, there was discomforting silence at first. Then, on Saturday evening, Prime Minister Gillard cautiously responded to press questions, stating that the Australian Government had made "representations" to the Chinese Government on Liu's behalf and "welcomed" the fact that his work had been recognised with the Nobel prize.

There may be a simple

explanation for Gillard's apparent reluctance to join other leaders in demanding Liu's unconditional release. China is Australia's largest trading partner (goods and services), with total trade valued at \$85.1 billion. China is also Australia's largest merchandise trading partner (valued at \$78.2 billion in 2009) and its largest source of imports. In 2009 alone, total imports from China were valued at \$37.3 billion. Some argue that Australia thus has a vested interest in accommodating Chinese leaders.

However, appeasing Beijing out of concern for economic prospects is based on a flawed assumption that Australian wealth is dependent on China. It is erroneous to suggest that we must forgo our liberal democratic principles in order to make money. As *The Australian's* Greg Sheridan pointed out in the context of the Stern Hu affair earlier this year, the

Chinese economy is at least as dependent on Australian commodities as Australia is on Chinese customers. China will buy commodities on the basis of price and reliability. The political dimension makes very little difference to that trade.

In April, then prime minister Rudd gave the 70th Morrison Lecture at the Australian National University on "Australia and China in the World". In that speech, Rudd called for a more balanced, mature and sophisticated approach to China, based on a deeper understanding of that country. He characterised the relationship as a "true friendship" – based on trust, commitment, and frank dialogue. True friendship, however, includes an obligation for both partners to be upfront and honest with each other. China deserves praise for its remarkable economic progress, which has lifted hundreds of millions of people out of poverty.

Yet, as the Nobel committee has noted, China's status as the world's second-largest economy also entails increased responsibility.

The Australian Government should remind China about this responsibility. It should demand Liu's unconditional release from prison and call on the Chinese Government to respect the right of all Chinese citizens to exercise their right to freedom of expression, as enshrined in the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and Article 35 of the Chinese constitution. Prime Minister Gillard should stand firmly by our belief in democracy and human rights for all countries, including China. Such a stance would not only demonstrate true leadership, it would give the Prime Minister some much-needed foreign policy profile, too.

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