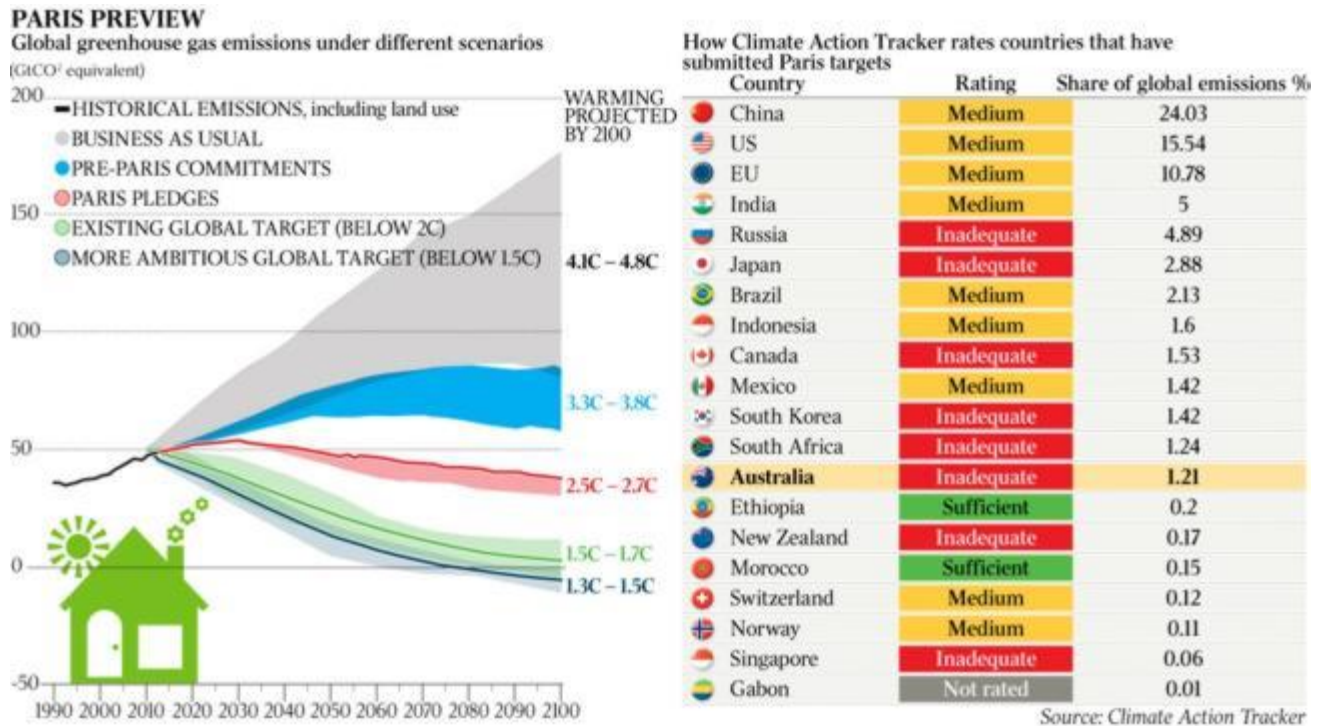


Political potholes on the road to Paris climate change talks

- by: *Graham Lloyd*
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For many, the dream of a developing world powered by solar with batteries is the modern equivalent of “let them eat cake”. *Source: AAP*



From the sky, a zooming gaze on to the rooftop of Malcolm Turnbull’s Point Piper, Sydney, mansion reveals a small collection of solar panels that produce electricity from the sun.

As an early adopter of solar, Turnbull has had a first-hand taste of the power and limits of a disruptive technology that will take a high-profile role in Paris negotiations, which have the presumptuous agenda of saving humankind from itself.

One month out from the UN climate change conference, formal negotiations remain bitterly divided, not over science but over money.

This week green groups were locked out of talks as negotiators grappled with who would fund and control more than \$100 billion a year in climate finance for the developing world.

From the sidelines, campaigners were calling for ever tougher actions on fossil fuels, pinning their hopes on the expansion of renewable technologies that so far have proved to be hugely expensive or not fit for purpose.

But for Australia, at least, Turnbull’s panels are a symbol of how the climate has changed.

As expected, the elevation of Turnbull to replace Tony Abbott has transformed the atmospherics surrounding Australia’s role in Paris. Rather than a pariah, Australia will be accepted to the talks as a

participant in change, despite the fact the nation's climate response has not altered in any significant way from what was proposed by Abbott.

Climate Action Tracker, a reliable global non-government organisation, still rates Australia's post-2020 target to cut carbon dioxide emissions by between 26 per cent and 28 per cent below 2005 levels by 2030 as "inadequate". But Environment Minister Greg Hunt says the group ignores the dramatic cut the target represents in terms of per-capita emissions and dismisses the traction being achieved through direct action policies.

Ahead of Paris, the government may announce further measures on forest protection or Obama-like regulations on vehicle emissions.

But the bigger truth is that behind the fervour of urgency projected by climate groups, Australia's redemption mirrors an equally unexpected retreat to the centre by former climate action leaders in Europe, where coal use is rising to the point that Germany is considered unlikely to meet its voluntary greenhouse gas targets.

In Britain there is crisis in the solar and wind industries over subsidy cuts, grave concerns about winter electricity supplies because of the intermittency of renewables, and moral crisis over the closure, in part because of prohibitive energy costs from a fixed floor carbon price, of big steelmakers.

But at home, by building a fresh narrative around embracing change, backing fresh ideas and rewarding innovation and technology, Turnbull has been largely successful in outflanking the dialogue of environmental catastrophe and perceived climate change "denial" that dogged Abbott.

A Turnbull government has been able to strike a successful balance between respecting the significant role, legacy and ongoing contribution of Australia's fossil fuel industry — the government remains firmly committed to Adani Carmichael mine, which will open up the Galilee Basin coal reserves in Queensland — with the opportunity afforded by what are hoped to be the sunrise industries of tomorrow.

Support for large-scale solar energy and rooftop solar power with the potential for battery storage at the household and business scale has been central to the government's new message and repositioning.

A series of decisions and statements by Hunt has been calculated to push a refreshed government ahead of the curve. The key message is the Turnbull government encourages change and sees new technology as integral to prosperity.

In an address to a Green Shift seminar in Canberra this month, Hunt said the Australian government was driving the green shift transformation "and working globally to build a future that reflects the newly adopted Sustainable Development Goals". An Office of Climate Change and Renewable Innovation has been created to concentrate \$15bn to "incentivise clean technology, innovation and deliver on-the-ground abatement".

For some, there is a subtle but important message in the use of "clean technology" rather than renewable.

In one of his first acts, Turnbull in question time stared down Labor's commitment to a 50 per cent target for renewable energy.

"Fancy proposing, without any idea of the cost of the abatement, the cost of proposing that 50 per cent of energy has to come from renewables," the Prime Minister said. "What if that reduction in

emissions you needed could come more cost-effectively from carbon storage, by planting trees, by soil carbon, by using gas, by using clean coal, by energy efficiency?”

Hunt says Australia will achieve its climate targets using “practical measures that harness innovation, improve productivity, reduce costs and protect the environment”. At the same time, he acknowledges it is inevitable that many people will choose to invest in solar panels with battery storage and that the trend has the full support of government.

In doing so, Hunt has effectively neutralised a perception that the Coalition is against renewable energy and silenced the politically significant solar lobby that had mounted an aggressive grassroots campaign against Abbott.

Hunt’s enthusiasm has surprised many within the established electricity supply and renewable energy industries, where big questions are being asked about the real long-term potential of solar and battery storage.

The peak electricity distribution lobby has begun a rearguard push to protect its investment in the electricity grid network. It has proposed a series of measures including compulsory connection fees for homes and businesses whether they are connected to the grid or not.

Trade websites evaluating the cost benefits of going off grid with solar and batteries say prices must fall much further to make it financially viable. Higher network charges and compulsory connection laws could keep the economics permanently out of reach.

But Hunt is probably correct in his assumption that many electricity consumers will make the investment in solar and batteries regardless of economics, driven in part by aggressive marketing by international firms who see Australia as a testing ground.

Glen Morris from the Australian Storage Council says cost benefits will become largely irrelevant as solar and storage become consumer items like flat-screen televisions or cars, which have an emotional appeal that goes beyond their economic merit.

But where this all fits in the Paris agenda to decarbonise the global economy remains moot.

As the Copenhagen Consensus Centre’s Bjorn Lomborg has written, despite the billions of dollars spent globally on wind and solar they still represent only a few per cent of energy production. Even with the trillions of dollars that will be spent in the future, all projections still envisage the majority of electricity supply coming from fossil fuels for many decades to come.

The big picture is that despite falling prices, the science appears firm that advances in solar and storage alone will not be the answer to combating global greenhouse gas emissions.

John Morgan, an adjunct professor in the school of electrical and computer engineering at RMIT University, has written that several recent analyses of the inputs to our energy system indicate that, against expectations, energy storage cannot solve the problem of intermittency of wind or solar power.

“Not for reasons of technical performance, cost or storage capacity,” he says, “but for something more intractable. There is not enough surplus energy left over after construction of the generators and the storage system to power our present civilisation.

“This is a rather unsettling conclusion if we are looking to renewable energy for a transition to a low carbon energy system; we cannot use energy storage to overcome the variability of solar and wind power.”

Morgan says wind and solar can reduce fossil fuel emissions but they cannot eliminate them.

This is a realisation that critical thinkers such as Microsoft’s Bill Gates have already come to and why they are calling for a multi-billion-dollar global effort on the scale of the development of the nuclear bomb to urgently develop new ways to produce clean energy.

Nonetheless, the Paris outcome is likely to be much more significant in terms of future technology development and investment than climate science, where many conflicting signals remain despite claims of a 97 per cent consensus. The 18-year pause in global surface temperatures remains contested but not adequately explained.

There has been a rash of papers restating concerns about long-term ocean health because of acidification and the instability in Antarctic ice with potentially catastrophic consequences for sea levels in centuries to come. On the other side, papers warning of cooling global surface temperatures in coming decades because of fluctuations in solar activity and long-term ocean cycles are being dismissed as natural variability in a long-term warming trend.

Some leading climate scientists, such US-based Judith Curry, say the sensitivity of the climate system to carbon dioxide has been overstated, bringing into question just how serious long-term temperature rises will be.

And there is a growing push to highlight the benefits of rising levels of carbon dioxide for plant growth and human comfort.

One trend that is clear is for climate scientists and groups to seek the authority of the courts to clamp down on dissenting views.

It is a development that scientists such as Curry say represents the “death of science”, highlighting the “authoritarian tendencies” of those reluctant to consider alternative views. Beyond these dynamics, the lessons from the disastrous Copenhagen meeting in 2009 appear to have been learned as expectations are tightly managed down for Paris.

With carbon reduction pledges now in for countries responsible for most greenhouse gas emissions, several things are clear.

Existing pledges are considered insufficient to limit future temperature rises to below the 2C target. Any agreement will not be legally binding on any nations.

And the Intergovernmental Panel on Climate Change process will continue in perpetuity with five-year rolling reviews.

Measuring progress against pledges to cut greenhouse gas emissions will be difficult and policing transgressions even more so.

The draft agreement being thrashed out is still unsure whether to include the word “compliance” under a regime that is “facilitative, non-punitive, non-adversarial and non-judicial”.

Climate Institute deputy chief executive Erwin Jackson believes a final agreement will provide a platform for tougher action that can be enforced. And he says negotiations are on track despite a

rearguard action this week by a bloc representing 130 developing nations, including India and China, that threw into turmoil the final talks before Paris.

Any hopes of smooth passage were dashed this week when a bloc of countries representing 80 per cent of the world's population insisted issues that have dogged the Paris talks since their inception in Durban, South Africa, four years ago were reinserted into the negotiating text. As a result, the text blew out from 20 pages to 32 pages full of conflicting positions.

The developing countries want a firm guarantee that a fund of more than \$100bn a year from 2020 will be administered by a new UN climate body rather than existing institutions such as the World Bank or International Monetary Fund.

If this is not clearly set out in the Paris agreement, they say, the process will have failed.

Developed nations, including Australia, are expected to contribute to the fund to foot the bill for the climate change "damage" to and economic and technological evolution of the developing world.

The draft agreement calls for the mobilisation of climate finance to be scaled up from the agreed \$US100bn a year from 2020.

But, in reality, developed countries so far have baulked at capitalising the fund to meet its 2020 target of \$US100bn a year. Only \$10bn has been pledged to the fund and, of that, only \$5.8bn has been delivered. The fund hopes to make its first investment decisions next month but, based on current reserves, has an annual budget of only \$700 million. India alone has estimated its transition will cost more than \$US2.5 trillion.

And this is the realpolitik of Paris. While the language of climate change may be rooted in science, the core of negotiations has always been about money and access to technology.

The IPCC is most concerned with shifting resources and development from the West to the lesser developed centres in Asia and Africa.

No one is expecting a Paris declaration to be ideal. The compromises are inherent in the need to include all major emissions nations such as China, the US, India, Europe, Brazil and Indonesia.

For some, universal participation will itself be a triumph.

Success will in large part reflect the bid by Barack Obama to make climate change a legacy issue of his fading presidency. Obama engaged with China's President Xi Jinping late last year in a high-profile effort to give the Paris talks momentum. Paradoxically, the free-market US has announced a raft of interventionist measures aimed at delivering carbon emissions cuts of 26 per cent to 28 per cent by 2025 from 2005 levels.

China has said it will aim to cap emissions growth by 2030 or before and pledged to introduce a nationwide cap-and-trade system for carbon dioxide emissions in 2017.

China has won widespread applause for engaging in the Paris process but the reality is the world's biggest emitter is still planning to increase its greenhouse gas output by more than 50 per cent during the next 15 years.

Meanwhile, the US President has yet to prove himself able to deliver on his pledges.

For its part, India has been a reluctant starter in the present round of climate change discussions from the outset.

The IPCC talks in Durban four years ago, which started the Paris process, are memorable for an outburst by India's lead negotiator as the conference ran into overtime. She said developing nations must continue to receive special consideration, a key sticking point in this week's talks in Bonn. In the end, agreement to continue the IPCC process from Durban owed much to India's desire that it not be made a scapegoat for failure.

Four year on, India has pledged to source 40 per cent of its electricity from low-carbon or renewable sources by 2030 and cut the emissions intensity of its economy by 35 per cent by 2030.

This means more than half of India's growing electricity needs will be supplied by fossil fuels.

Analysis of the Indian pledge estimates that if the Indian economy grows as planned, the country's carbon dioxide emissions will treble during the next 15 years.

Again, the sticking point is money. In exchange for joining the process, India expects the developed world to foot the bill of India's modernisation.

India is articulating the moral argument of modernisation that is supported by the IPCC and Pope Francis, who effectively said using fossil fuels to relieve poverty was the lesser of two evils.

In a lengthy preamble to its pledge to the UN, India says the desire to improve one's lot has been the primary driving force behind human progress.

"Nations that are now striving to fulfil this 'right to grow' of their teeming millions cannot be made to feel guilty of the development agenda as they attempt to fulfil this legitimate aspiration," the India text says. "Habit and attitude are as much a part of the solution as technology and finance.

"It must be understood that poverty is a big polluter; so is the extravagant way of life and a profligate pattern of consumerism a grave threat to the environment."

It is against this reasoning that Australia must decide the balance regarding making available its vast high-quality coal for use in new generation plants to promote poverty alleviation and development.

Improving efficiency at home and joining the push to invest in development of new, clean-power technology makes a lot of sense.

But for many, the dream of a developing world powered by solar with batteries is the modern equivalent of "let them eat cake".