

THE US-CHINA JOINT ANNOUNCEMENT ON CLIMATE CHANGE AND CLEAN ENERGY COOPERATION: WHAT'S THE BIG DEAL?



The Climate Council is an independent, crowd-funded organisation providing quality information on climate change to the Australian public.

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Key findings

- Momentum on climate change has been building through 2014 with the large global powers, China and the US, leading the way.
 - The world's largest economies China, the US and the European Union (EU) have recently announced ambitious targets for reducing emissions post-2020, including flexibility to increase their commitments.
 - The seriousness of the US-China announcement is reflected in the substantive actions each country has already taken, for instance, the Chinese emissions trading scheme covering 250,000,000 people and US coal regulations.
 - The Global Climate Fund has now received commitments from the US, Canada, Germany, Japan, South Korea, the UK and a number of other nations.
- 2. The recent US-China announcement has put significant economic and geopolitical pressure on Australia to up its game on climate change.
 - The US-China deal coming immediately before the G20 exposed Australia's increasingly isolated approach to climate change and energy policy. Australia's emission reduction target lags behind its allies and major trading partners.

- The US and China are major drivers of the global economy and the announcement will have a significant impact on economic decisions worldwide. It is estimated that this announcement could result in a \$4.5 trillion loss in revenue for the fossil fuel industry over the next 15 years. China's "energy revolution" will install more low emissions energy than its entire existing coal fleet that is likely to drive further cost reductions in renewable energy.
- Australia will be under weighty international pressure to increase its domestic action to tackle climate change.
- 2015 is a critical year for global action on climate change as the world builds to the Paris climate negotiations.
 - > The timing of the US-China climate announcement is important because it comes well before the UN climate summit in Paris next year and with significant time for other major polluters and economies to state their post-2020 emissions reduction targets.

Why this US-China deal is significant for the world

In recent years, the US and China have moved from laggards to global leaders on climate change (Climate Council 2014).

In November 2014, these two superpowers strengthened their positions, with China's President Xi Jinping and US President Obama jointly announcing post-2020 targets:

- The US committed to reduce greenhouse gas emissions 26-28% below 2005 levels by 2025 (a doubling of its 2020 commitment to a 17% reduction by 2020) (The White House 2014).
- > For the first time ever, China has committed to peak and then decrease its emissions around 2030 (possibly earlier). China has also set a new target for 20% of primary energy to come from zero emissions sources by 2030 (building on the previous target of 15% by 2020). This will require China to deploy an additional 800-1,000 gigawatts of non-fossil fuel emission generation capacity by 2030 more than all the coal-fired power plants that exist in China today and close to total current electricity generation capacity in the US (The White House 2014).

"The US committed to reduce greenhouse gas emissions 26-28% below 2005 levels by 2025 (a doubling of its 2020 commitment to a 17% reduction by 2020)." The White House 2014

Ⅲ FIVE REASONS WHY THE US-CHINA CLIMATE ANNOUNCEMENT IS IMPORTANT

- 1. It builds on earlier efforts (Table 1) and sends a strong message to the rest of the world that both these superpowers are serious about tackling climate change leading up to a crucial year for climate negotiations.
- 2. At the UN Climate Summit in Copenhagen in 2009, the world failed to reach agreement mainly because of conflicting positions between developing and developed countries. This joint US-China climate announcement is significant because it shows how both developed and developing countries can work together to tackle climate change (SMH 2014). Further, China taking on an absolute emission reduction commitment signals that developing countries will also be expected to take on these kinds of commitments.
- 3. The US and China are major drivers of the global economy this announcement could have a significant impact on economic decisions worldwide. For example, according to Citigroup analysts, this announcement could result in a \$US 3.9 trillion (\$A 4.5 trillion) loss in revenue for 'Big Oil' and 'Big Coal' over the next 15 years from the joint reduction of greenhouse gas emissions by the world's two biggest economies (RenewEconomy 2014a). Other analysis shows how China,

- by boosting markets in water, wind and solar power is driving down costs and accelerating the uptake of renewable energy (Mathews and Tan 2014).
- 4. By showing leadership, these two heavyweights can help build global momentum and encourage other major economies and polluters to join them in accelerating global action on climate change. We've seen an example of this as recently as the G20 meeting in Brisbane in November 2014 when pressure by the EU and the US to get climate change on the summit's agenda resulted in the G20 'Brisbane Communique' outlining members commitment to tackle climate change and to communicate post-2020 domestic climate targets as soon as possible and preferably by the first quarter of 2015 (ABC 2014).
- 5. The timing of the US-China climate announcement is important because it comes well before the UN climate summit in Paris next year and with significant time for other major polluters and economies to state their post-2020 emissions reduction targets. This is a positive sign for the international community coming to an agreement in Paris.

The US-China climate announcement has been hailed a 'game-changer' by many, while others have been more critical. Table 1 shows how the misconceptions of this accord have been dispelled.

Question	Answer
Is this a one-off announcement or is this part of a concerted effort by China and the US to tackle climate change?	Recently, China and the US have significantly stepped up their efforts to tackle climate change.
	China now has the world's second largest carbon market with seven domestic emissions trading schemes in operation covering a quarter of a billion people. China is also number one in the world for installed renewable energy capacity, new installations and investment.
	The US is second in the world for installed renewable energy due to a range of state based renewable energy targets, incentives and initiatives. And over half of the states of the US have renewable energy targets and ten states operate emissions trading schemes, including one of the world's largest economies – California.
	On 2 June 2014, as part of the Clean Power Plan, the Environment Protection Authority issued "Flexible Carbon Pollution Standards for Power Plants" to help curb pollution from coal. Nationwide, the EPA projects the new regulations would achieve 30% reductions on 2005 levels by 2030 in electricity generation CO2 emissions.
	The latest announcement builds upon these previous efforts by China and the US to tackle climate change.
Is the new US emissions reduction target the same as that proposed in the Clean Power Plan published by the Environmental Protection Agency in June 2014?	No. The Clean Power Plan only targets carbon dioxide from power plants, while the new commitment covers the entire US economy.
In the US, can the Republicans block the new emissions reduction targets?	The US announcement with China does not need Senate approval because it is not a formal treaty but the Republican majorities in both houses have an array of tactics to delay it (e.g. call for hearings and investigations, defund and restrict parts of the climate plan).
By offering to start cutting its emissions by 2030, is it true that China is doing nothing until then?	This is historic - China has never put a cap on emissions before. And China has been making steady progress in recent years, with an overall decline in carbon intensity of 26 percent between 2005 and 2013. But there is a lot more to do if China is to get 20% of its energy from non-fossil sources by 2030.
Does this announcement have any legal force and are there any penalties for noncompliance?	This announcement is not a bilateral treaty or other legal commitment. However, this doesn't mean that the deal won't influence future emissions reduction targets. International agreements, even if informal, can exert important influence on domestic action. And this announcement was most likely timed to inject momentum towards the UN climate summit in Paris which aims to set post-2020 targets and establish a new global deal on climate change.
The announcement isn't ambitious enough – how can it keep the world from warming more than 2°C, the threshold which the international community has agreed to limit climate change?	The US and China alone can't put the world on a 2°C path. The EU has urged other major polluters (e.g. G20 countries) to announce their post-2020 emissions reduction targets so that the international community can assess if collective efforts can keep global temperature increases well below 2°C. While the US-China announcement represents a significant step forward, it is not enough. All countries must rapidly decarbonise their economies.

"There is increased evidence that climate change is already affecting many natural and human systems and poses significant risks to human health..." IPCC 2014a

The superpowers are showing their cards and global momentum to tackle climate change is building. The US-China announcement follows only a month after the EU announced new 2030 targets to reduce emissions by at least 40% below 1990 levels and for renewable energy to make up 27 % of final energy consumption (European Council 2014). However, China, the EU and the US cannot tackle climate change alone. As the EU Commission President Junker and EU Council President Van Rompuy stated, "The announcements [US-China and EU] to date cover around half of the global emissions. We urge others, especially the G20 members, to announce their targets in the first half of 2015 and transparently. Only then can we assess together if our collective efforts will allow us to fulfil the goal of keeping global temperature increases well below 2°C" (European Commission 2014).

There is increased evidence that climate change is already affecting many natural and human systems and poses significant risks to human health, ecosystems, infrastructure, agricultural production and communities (IPCC 2014a). In response to this increasing threat, at the United Nations Framework Convention on Climate Change (UNFCCC) Climate Summit in

Cancun, Mexico in December 2010 the Green Climate Fund was established. This fund aims to provide support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change. Since Cancun, 22 countries – including the US, Canada, Germany, Japan, South Korea, the UK and a number of other nations - have made combined contributions of US\$ 9.7 billion to the Green Climate Fund (Green Climate Fund 2014).

The UNFCCC Conference of the Parties in Lima (1 - 12 December 2014) aims to keep the global momentum going by drafting a universal agreement on climate change, discussing initial capitalisation of the Green Climate Fund, and stimulating significant national contributions to tackle climate change (UNFCCC 2014). At the Climate Summit in Lima, Australia will no doubt be under pressure to announce new and ambitious post-2020 emissions reduction targets more aligned with its allies and major trading partners.

Why this US-China deal is significant for Australia

The China and the US announcement, together with the EU's commitments are increasing pressure on Australia – as one of the world's largest emitters and a member of the G20 – to improve domestic action on climate change and increase emissions reduction targets for 2020 and beyond.

Australia, once a global leader on climate change is now lagging behind its major allies and trading partners (Climate Council 2014). Australia's current unconditional target to cut greenhouse gas emissions by 5% of 2000 levels by 2020 is far below our allies and trading partners (Climate Change Authority 2014). If Australia were to match the US goals then Australia would have to set a 30% emissions reduction by 2025 (Climate Institute 2014a).

According to the G20 'Brisbane Communique', Australia and other G20 members are to announce their post-2020 goals as soon as possible and preferably by the first quarter of 2015 (ABC 2014), leading up to the Paris climate summit next December.

"As a wealthy, developed country—and a high emitter in per-person terms—Australia will be expected to put forward a transparent and equitable unconditional target." Climate Change Authority 2014

The Climate Change Authority (2014) recommends Australia adopt a minimum 19% reduction on 2000 levels by 2020, and a trajectory range of between 40 and 60% by 2030.

The Climate Institute (2014b) has calculated that for Australia, as one of the world's largest polluters, to play its part in limiting global warming to 2°C or below, it should:

- Make a minimum and clear commitment to limit emissions to 40% below 2000 levels by 2025.
- Establish a pathway to 65-75% reductions by 2035, and set a date to achieve zero net emissions.

Australia cannot ignore this issue, as it will undoubtedly be affected by the global response to climate change. For example, Australia's thermal coal exports to China (which currently make up 13% of all Australian exports) will undoubtedly be affected by China's commitment to peak emissions before 2030 because China will have to dramatically reduce its coal use in absolute terms (The Age 2014). New analysis from Deutsche Bank shows that in October and November 2014 Chinese coal imports have fallen by around 50% compared to previous months. This, in turn, could have serious implications for Australian coal exporters (RenewEconomy 2014b).

As China reduces its reliance on coal. it is ramping up its renewable energy uptake. In 2013, for the first time China installed more renewable energy capacity than fossil fuels (REN 21 2014). No other country is investing so much money or generating so much renewable energy, and this has had an impact on the global markets. For instance, by supplying the domestic and international market, China has helped to drastically cut the global costs of photovoltaic panels by 80% since 2008. Solar-power users around the world have all gained from these lower prices (Mathews and Tan 2014).

Global Action on Climate Change

Despite the positive developments by China, the EU and the US, limiting global warming to 2°C or less requires urgent action by all countries. An effective global agreement to limit greenhouse gas emissions post-2020 will be a critical step towards meeting the target of limiting a global temperature rise to 2°C or less this century.

To have a good chance – two-thirds or greater – of stabilising the climate at the 2°C target, the world has a total budget of 1,000 billion tonnes of carbon emissions from all human sources since the beginning of the Industrial Revolution. By 2011, half of this global carbon budget had already been consumed and as the rate of emissions is rising, we are consuming the remaining budget at an ever-increasing rate (Carbon Tracker and Grantham Institute 2013: Climate Commission 2013; IPCC 2014b). Exceeding the carbon budget would increase the risk of severe, pervasive, and in some cases irreversible climate change impacts (IPCC 2014b; UNEP 2014).

Global action is required to make deep cuts in greenhouse gas emissions and keep within the limits of what the science says is needed to prevent the worst impacts of climate change. The US-China announcement and recent EU targets to cut emissions and increase renewable energy uptake are all positive steps leading up to the UN climate negotiations in Lima in December 2014 and then culminating in Paris next year, where world leaders will come together in an attempt to reach a binding and universal agreement on climate change.

Now, more than ever, we need international action on climate change.

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