

Explainer: How countries could come to a global climate deal in 2015

March 12 2015, by Anita Talberg And Malte Meinshausen



Countries are working towards meetings in Paris in November that could see the first global climate deal since the Kyoto Protocol. Credit: Taylor Miles/Flickr, CC BY-NC-SA

At the end of this year, 196 countries from around the world will [meet in Paris](#) for the first attempt to reach a global deal on climate action since the much-hyped climate talks in Copenhagen in 2009. Hope is building that Paris will see an agreement to reduce greenhouse gas emissions beyond 2020, and ultimately keep global warming to below 2C.

In the lead-up to the meeting, countries will submit intended contributions to a global climate deal, known as INDCs, or [Intended Nationally Determined Contributions](#). These may be targets and baselines (for instance, [greenhouse gas](#) emissions 40% below 1990 levels by 2030), but may also take other forms.

Essentially, an INDC is a public pledge from a country on how it plans to play its part in post-2020 collective action on climate change.

It is hoped that all countries that intend to publish an INDC will do so well in advance of the upcoming climate conference in Paris in December 2015. The secretariat to the UN's climate change body is to produce a report on the total effect of INDCs submitted by 1 October 2015.

To date, Switzerland and the European Union [have submitted](#) INDCs and the majority of country submissions are [expected](#) before September.

But how will these INDCs fit into a global climate deal?

Paris goes more bottom-up

The [Kyoto Protocol](#), adopted in 1997, is often considered a top-down treaty because all the rules and parameters were agreed internationally. In practice there was still a strong bottom-up element, with countries setting their own [emissions-reduction](#) targets. A true top-down treaty would begin with a collective target (say, of staying below 2C) and then derive from that each country's reduction commitment according to some internationally agreed method.

The successor to the Kyoto Protocol, the new climate agreement to be finalised in Paris, is shifting the weight further away from the top-down towards the bottom-up. INDCs are the bottom-up elements (self-

determined targets) and a consistent accounting approach across the board (such as the scope and type of target, or whether credits can be substituted) could be a thing of the past. The degree to which common rules for monitoring and verification will be part of the [Paris agreement](#) remains to be seen.

Emission reduction targets and more...

What should be included in INDCs? The [outcome](#) of the most recent major climate talks in Lima in 2014 explicitly requested that countries:

- Include in INDCs how they plan to contribute to stabilising atmospheric greenhouse gas concentrations (see Article 2, page 9 of [this document](#))
- Include an explanation of how the INDC contribution is "fair and ambitious", in the context of national circumstances
- Consider including an adaptation component
- Communicate in such a way that "facilitates the clarity, transparency and understanding" of the INDC
- Include where possible quantifiable information such as reference years for emissions reductions, time frames, inclusions and exclusions, assumptions, and methods used for estimating [greenhouse gas emissions](#).

Many developed countries are likely to prioritise aspects of emissions reduction and particularly those that are quantifiable. For example the [European INDC](#) targets an emissions reduction of at least 40% below 1990 levels by 2030 for domestic action. [Switzerland's INDC](#) targets a reduction of 50% below 1990 levels by 2030, but includes the use of international market mechanisms.

In contrast, many developing countries are calling for INDCs to provide information on adapting to [climate change](#), financial support needed or

to be given, and technology transfer.

In response to these differences of opinion, German-based think tank Climate Action Tracker is [pressing for](#) governments to ensure that INDCs are based on "rigorous and scientifically sound emissions information". At the same time, there is a recognition that countries differ in their abilities and capabilities to provide measurable, reportable and verifiable information.

Alongside this discussion on content, there is also an ongoing debate on what should be the legal forms of both INDCs and the overarching Paris agreement.

Keeping warming below 2C

As the "i" in INDC indicates, INDCs are proposals but are not yet set in stone. These proposals will be assessed collectively to determine the resulting global effort.

In all likelihood the collective effort will be insufficient to stay within the 2C guardrail.

So how will INDCs help a deal to keep warming below 2C? It is anticipated that in Paris countries will agree on an assessment process to compare INDCs, with a view to "ratcheting up" the effort. This iterative process aims to produce ambitious collective global action before 2020, when the agreement will come into force.

It is not yet clear how the INDCs will be assessed, though. Will only emissions reduction targets be counted? How will unquantifiable targets (such as peaking emissions before a certain date) be measured? How will targets that are conditional, for example on international finance, be considered? Will emissions reduction and financial support

needed/proposed be assessed in tandem? Will all elements of the INDCs (which will unavoidably differ between [countries](#)) be assessed? And if so, how? Discussions on these sorts of issues are expected in the lead-up to and in Paris.

Another big question is whether major economies will indeed strengthen their emission reduction commitments in response to the collective effort being deemed insufficient.

What about Australia?

In [climate](#) talks in Copenhagen in 2009, Australia committed to a [short-term emissions reduction target](#) of 5% on 2000 levels by 2020. Then, for the second commitment period of the Kyoto Protocol-covering 2013 to 2020 Australia pledged a 0.5% reduction on 1990 levels, which is equivalent to a [2% reduction below 2000 levels](#).

Post-2020, Australia's commitment is undecided. Under the previous government a long-term target of 80% emissions reduction below 2000 levels by 2050 was legislated in the Clean Energy Act 2011. However, that legislation has been repealed.

The Minister for Foreign Affairs Julie Bishop [asserts](#) that Australia's INDC will be announced by mid-2015. She also says that a taskforce has been established within the Department of the Prime Minister and Cabinet to "consider a new post-2020 target for Australia".

The taskforce is not listed on the government's website but is [said](#) to include "people from different departments ... within PM&C [Prime Minister & Cabinet] and working closely with DFAT [Department Foreign Affairs and Trade], the Department of the Environment, the Department of Industry and Science and the department of the Treasury".

The government has also [requested](#) that the Climate Change Authority review "what future emissions reduction targets Australia should commit to".

For a reasonable chance of staying within the 2C limit, global emissions need to return to at least 1990 levels by 2030 and be halved by 2050 (which is equivalent to a 60% reduction below 2010 levels). Australia is one of the wealthiest nations and has, for its population, the highest emissions in the developed world. Australia's INDC will need to reflect its fair share of this collective effort.

The Climate Change Authority's [recommendation](#) is a target of between 40% and 60% below 2000 levels by 2030. While 40% would represent a straight-line trajectory towards an 80% reduction by 2050, most effort-sharing proposals (see [here](#) for example) put Australia's fair share at the 60% side or even well beyond that range.

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