POLICY WATCH:

Getting a fair deal

To succeed, any new global climate deal agreed upon in Paris must be fair and equitable — Sonja van Renssen reports.

China's cumulative greenhouse-gas emissions since 1990 will outstrip those of the US either this year or next, calculate two separate research groups in Norway and the US. "A few years ago China's per capita emissions were low [and] its historical responsibility was low. That's changing fast," Glen Peters of the Center for International Climate and Environmental Research in Oslo, Norway, told news agency Reuters in April[1]. He believes that China will overtake the US this year. The US-based World Resources Institute (WRI) is betting on 2016. China's per capita emissions today are already at around EU levels.

These figures completely reshape the dynamic of negotiations for a new global climate deal. The famous principle of "common but differentiated responsibilities and respective capabilities"[2], enshrined in the UN Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol, has always meant that developed countries should lead action on climate change because of their historic responsibility and because they are richer than other nations. Developing countries, in contrast, could take on voluntary commitments and still use fossil fuels to help end poverty.

As the figures from China illustrate, things are not so simple anymore. The line between developed and developing countries is blurring. "The Annex I versus non-Annex I [distinction between developed and developing countries in the UNFCCC] is unofficially disappearing," says Romain Morel, project manager for Climate, Investment and Decision-Making at French think-tank CDC Climat Research in Paris[3]. "It's less and less a blocking point." The modern interpretation of common but differentiated responsibilities is "self-differentiation", says an EU official: "It means that every country comes forward with its own [mitigation] pledge."

This is the bottom-up 'pledge and review' system that is the reality of the global climate talks today. It is far from the top-down Kyoto Protocol system — favoured by the EU — that laid down emissions reduction targets for each country. Yet the international legal regime remains important, even if pledges are confined to national law, because it can set the rules for review. "You need a significant review system that puts the spotlight on leaders and laggards — and imposes a political cost on the latter," says Joseph Aldy, assistant professor of Public Policy at Harvard Kennedy School and visiting fellow at Resources for the Future, in the US.

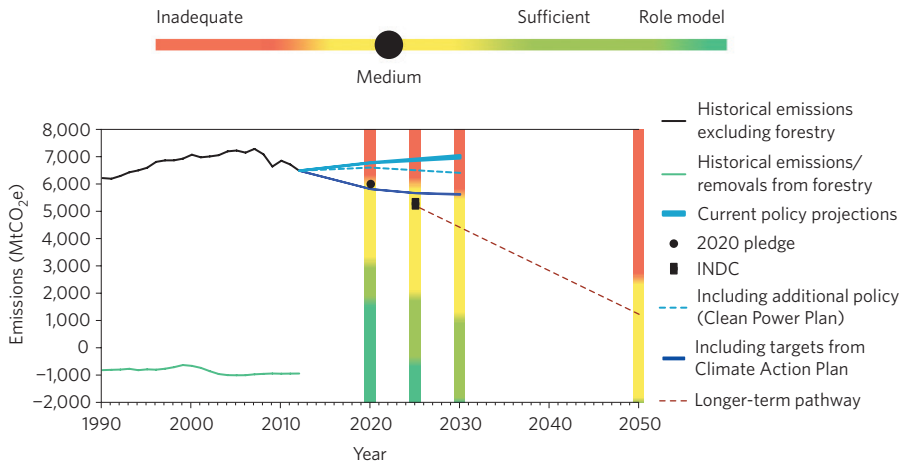

Figure 1 | Climate Action Tracker analysis of the US climate pledge for Paris. The US pledge, or INDC for a new global climate deal is rated medium. This means it is at the least ambitious end of what would be a fair contribution to climate action and is not consistent with limiting warming to 2 °C, unless other countries make comparably greater effort. The inclusion of forestry introduces uncertainty, as well as taking some of the pressure off other economic sectors to act. The analysis shows that the US will need to implement President Obama's Climate Action Plan in full to meet its 2020 target and that further policies will be needed to meet the 2025 target. Even then, reductions will need to keep accelerating for the country to meet its long-term goal of cutting emissions by around 80% by 2050. Figure reproduced with permission from Climate Action Tracker, © www.climateactiontracker.org/Climate Analytics/Ecofys/NewClimate/PIK

There are two elements to any review. First, do the pledges add up to a good probability of limiting global warming to 2 °C? And second, how do the pledges compare with one another? In October, the EU and Morocco (which is due to take over the presidency of the UN climate talks after Paris) plan an international workshop to discuss the pledges. Before Paris, the UNFCCC is also due to publish an (aggregate) assessment of all the pledges it has received. This will answer the first question — in the negative, say experts — but not the second: is every country doing its fair share?

Equity advocates such as Tom Athanasiou, who has helped develop a climate equity reference calculator (http://gdrights.org/the-climate-equity-reference-project), hope that in Paris, governments will commit to creating a review process that includes equity. "The key for Paris is: how do you express the shortfall [to two degrees] in a way that is helpful," says Athanasiou. "If it is done wrongly, it could be destructive." The WRI wants Paris to mandate an equity framework by 2017. It proposes to include parameters such as emissions responsibility (current and historic), economic capability, vulnerability to climate impacts, the relative costs of action and the benefits of action[4].

There are plenty of ideas on how to measure equity. Aldy imagines a suite of metrics based on four principles: comprehensive (capture the entire mitigation effort), observable (preferably quantify effort), reproducible (verifiable by outsiders) and universal (for use by as many countries as possible)[5]. Emissions-related metrics are the historical standard, he explains, but can be influenced by many non-policy factors. Abatement costs probably best capture effort, but require

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sophisticated modelling and subjective assumptions. Finally, price-based metrics — carbon prices or energy prices — can be hard to collect and need economic analysis.

Experts such as Morel do not believe that a formal equity reference framework will be agreed: "It will be more a process of political pressure from one country to another." Aldy adds: "Who should be comparable with who will emerge organically from domestic politics. Countries will naturally look among their trade partners." The idea of a single review process that addresses all countries, whether formal or informal, is gaining ground. Morel points out that the requirements for countries' intended nationally determined contributions (INDCs), or post-2020 climate pledges, due to be submitted to the UNFCCC this year, are the same for everyone. He notes a proposal by Brazil that all countries — except for the Least Developed — adopt economy-wide emissions reduction targets. These could differ in form, for example absolute or intensity-based, but with a view to becoming absolute over time[6].

"What governments are focused on are types of commitments and legal structure," says Mark Lutes, senior Global Climate Policy Advisor for WWF in Brazil. "A lot of big developing countries like Brazil, India and China have not supported any process to assess equity, especially if such an assessment does not focus on historical responsibility." For many of them, the equity conversation is about what kind of target different countries will have and with what legal status.

What can we say about the climate pledges that countries have submitted so far? The Climate Action Tracker, produced by four research organisations in Europe, has rated most of the INDCs that have come in so far as 'medium' (http://climateactiontracker.org/indcs.html). This means that if all governments adopted this notion of how much they should do, warming would probably exceed 2 °C (Fig. 1). This work is based on an effort-sharing approach incorporating the principles of equality (for example, per capita emissions should converge), historic responsibility and capability (richer nations should do more). The full range of results is used in the final evaluation.

To illustrate how the results can vary, note that the US pledge to cut emissions by 26–28% below 2005 levels by 2025 is 'fair' if it's based on mitigation potential, but far below what is needed if you consider equal cumulative per capita emissions, for example. In the INDCs, countries themselves explain why they think their pledge is 'fair and ambitious' and will choose indicators that suit them. For example, the US does not mention per capita emissions but points out that it will double its rate of emissions reductions compared with today.

The Climate Action Tracker team is working on two other methodologies: a comparison of pledges to mitigation potential and to decarbonization indicators such as emissions intensity. Ideally, it would also add a comparison to good practice policy. "A renewable or energy efficiency target can be much more ambitious than an emissions reduction target," says Niklas Höhne, a founding partner of the NewClimate Institute, one of the Climate Action Tracker's contributors.

There are uncertainties that make the climate pledges hard to judge. One is how countries account for land use, land-use change and forestry. The Climate Action Tracker rates the Russian INDC as 'inadequate', in part because Russia foresees full use of its forests to absorb carbon. That, combined with a 1990 baseline, mean the country could actually increase its emissions by 40–50% by 2030 compared with today, calculates the WRI (http://cait2.wri.org). There is also uncertainty over the impact of domestic policies, such as the persistent surplus of carbon credits in the EU Emissions Trading System (ETS), and what might happen when countries with different rules (on international offsets, for example) start to trade.

So far we have discussed ways of comparing pledges, with equity a part of that. "[But] a fair share is relative to your definition of fair," says Athanasiou. His climate equity reference calculator lets the user choose a mitigation pathway and test different equity settings. "The differences between defensible cases are much smaller than the similarities," he finds. Athanasiou proposes 'equity bands' and concludes that "the INDCs by and large propose only half of the fair shares of developed countries." In fact, the mitigation 'fair share' of countries like the US exceed its domestic potential so "international financial and technological support is as important as ambitious domestic mitigation action."

Developing countries are establishing two-tier INDCs that include an unconditional mitigation pledge and a pledge conditional on aid. David Waskow, director of WRI's International Climate Initiative, also believes that most developing country INDCs will go beyond mitigation: "Equity has to span not only tonnes of emissions but also adaptation, resilience, capacity-building, and so on." Equity experts lament the fact that INDCs are not required to cover these areas. The WRI has worked with Ethiopia to embed agriculture and forestry — and an understanding of how these affect mitigation and adaptation — into its INDC. Mexico was the first country to include an adaptation component, with concrete goals such as halving the number of towns 'most vulnerable' to climate impacts by 2030.

What all this comes down to is embedding climate policy in sustainable development policy. This is already very much the case for climate finance — which is, in practice, part of development aid. The EU says it is "too early to elaborate on the scale and type of climate finance needed post-2020." But Morel cautions: "Financing is a matter of trust, it's a first step. He adds: "On financing, the rationale is a bit more based on past emissions."

The EU has traditionally redistributed revenues to get poorer countries on board with its climate policies. "You should not dilute your target," says Femke de Jong from Carbon Market Watch. "To be fair to developing countries, you shift revenues [to them]." She acknowledges that even in the EU, however, countries such as Luxembourg that have struggled to reduce non-ETS emissions from transport for example, are loathe to spend money on cheaper reductions in Central and Eastern Europe.

But the fact is that the mitigation potential of countries such as India and Indonesia is probably much larger than their 'fair' share. The world's goal of maintaining a good probability of limiting warming to 2 °C requires action in all major emitters. "We need to stop talking about fair share," says Athanasiou. "All countries need to do their utmost." The question is: how can all countries do so, in a world where emissions must very rapidly peak and decline even though some have per capita incomes that are ten times lower than others? There is work to be done to make the case that development need not depend on access to fossil-fuel energy. ❐

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