COP21 AND ITS IMPLICATIONS

David Robinson, January 5, 2016

The Paris Agreement represents a monumental and successful effort to avoid a complete breakdown of climate change negotiations. At the same time, we cannot assume that the governments who signed the agreement will comply with their commitments, or deliver more ambitious commitments later. COP21 has important implications, not only for the government signatories, but also for non-state actors who will increasingly provide leadership on climate change mitigation and adaptation.

Highlights

A victory over process: The process of negotiations was so complex and the interests so diverse that the prospects of achieving any meaningful consensus were low. In this sense, COP21 was a major achievement. Almost 190 countries accounting for over 96% of global GHG emissions submitted Intended Nationally Determined Contributions (INDCs), mainly to mitigate greenhouse gas emissions (GHGs). These countries also reaffirmed the goal of limiting the global average temperature increase this century to 2ºC (above pre-industrial levels) and added an aspirational but unrealistic goal of 1.5ºC. They also agreed to a process for reporting and reviewing progress and raising ambition every five years and to the operational goal of achieving "a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century". Furthermore, the developed countries confirmed their financial commitment of at least $100 billion per year for developing countries from 2020.

Not a victory over climate change: If met, the combined INDC's offer a 50% probability of an increase of about 3ºC (over pre-industrial levels) in the average world temperature this century; significantly above the agreed limit of 2ºC that made the headlines. Significantly more mitigation will be required later to stay below 2ºC. A colleague suggested the following metaphor. Imagine a bank offering a mortgage with no down payment, a 5-year waiver on interest payments, very limited interest payments in years 5-15 followed by huge payments after that. Furthermore, since the mitigation targets in the INDCs are not legally binding, the Paris Agreement is akin to the bank demanding no collateral. If a major emitter, say the US or China, were to fail to meet its commitments, the whole agreement could unravel.

Winner and losers at the COP: The happiest people at the COP were the UN and the French hosts who were desperate to avoid the sort of failure associated with the Copenhagen COP in 2009. India and China fared well since they managed a degree of differentiation (on mitigation and on reporting) compared to the developed countries. The US managed to craft language that avoids formal approval from the US Congress – a non-starter given the current political climate. The EU could claim that they had been right in taking early action to address climate change. Canada showed that it was ready to take a supportive role after many years of being viewed by the world's climate change community as a "colossal fossil".

On the other side, the fossil fuel lobby should not be happy about the medium and long-term implications of the COP. However, the oil and gas industry is more concerned now about the immediate problem of low prices than about the long term implications of the COP, and the coal industry should be relieved that there was not more pressure on India and other emerging nations to reduce rather than expand coal consumption. The biggest losers were those countries that are most vulnerable to the consequences of climate change, notably the small island states. In particular, the explicit exclusion of liability and compensation for losses related to climate change was a huge disappointment for them.

But the true winners and losers will be determined by how and whether the world addresses the climate change crisis, both through international agreements and in other ways, such as technological innovation to reduce the cost of decarbonized energy sources. Failure to do so effectively will make most people, especially future generations, the losers. The agreement offers some hope of success, but almost all the hard work needs to begin from here.

Implications for action

Overcoming low ambition and the free rider problem. Within the agreement, the main tool for encouraging compliance and greater ambition is to "name and shame" those that do not comply or raise their ambition. At the very least, this requires emphasising reporting and verification of what is being achieved. But that is not enough. Free riding is likely since the benefits of solving the climate change problem for any country will always appear much greater than the costs, especially when there is doubt about whether others will comply. One idea worth exploring is the creation of smaller "carbon clubs" comprising major emitters that are committed to greater ambition and ready to enter into a more enforceable agreement ("I will if you will"). Clubs of this kind may encourage non-members to join with the help of carrots and sticks.

Transformation of economies. Complying with the targets implied by the Agreement will require a huge transformation of most economies – which is why compliance is so difficult. For instance, the EU has a political objective to reduce CO_2 emissions by 80-95% by 2050 compared to 1990 levels. With the technologies that are currently available and economically viable, this implies almost complete decarbonisation of the electricity sector, significant electrification (i.e. replacement of fossil fuels) in transportation, households and industry, as well as major improvements in energy efficiency. The faster the transition is made, the more challenging it will be and the greater will be the resistance from the potential losers, including fossil fuel providers, electricity generators relying on fossil fuels, energy intensive industrial users and parts of the automobile industry. The significance and cost of this sort of transformation over a 35-year period require a broad political agreement within Europe and within each Member State.

The importance of competition and price or other incentives. It is essential to achieve the climate change objectives as efficiently as possible. Governments should use competitive mechanisms to promote innovation and to minimize cost. Most economists favour a clear and credible long-term carbon price signal, but the credibility of carbon prices is in short supply these days, certainly in the EU. Other mechanisms may be required, preferably ones that favour competition among technologies.

Technology development and transfer to reduce emissions growth from emerging countries. One of the most serious problems not resolved at the COP was the substantial plans to build new coal-based power stations in the largest emerging countries, with India planning to double coal consumption. Surely there is room here for a deal here with the developed countries, whereby finance will be made available to avoid this. In the meantime, it is urgent to accelerate research and innovation to develop low-cost, low-carbon sources of energy.

The role of subnational governments and the private sector. For more ambitious outcomes, we should not rely only on national governments that signed the Paris Agreement. Indeed, many of them will get in the way of progress. We should look rather to "sub-national" actors such as regions, states, provinces and cities, as well as to key players in the private sector. Action by these actors was very visible before and at COP21 and is summarized under the title of the Lima-Paris Action Agenda.

Sub-national governments often have significant political credibility, financial muscle and motivation to tackle climate change and to coordinate on an international scale. For instance, ICLEI and the C40 group together hundreds of cities around the world. They are committing significant financial resources to mitigation and adaptation, including collaboration on an international scale. (http://c40.org/ending-climate-change-begins-in-the-city)

Just as significant is the Under2MOU (http://under2mou.org) signed by over 120 states, provinces and regions around the world. This was launched in 2015 by California and the German State of Baden-Württemberg with the aim of galvanising action among regions to limit warming to below 2ºC. Under it, signatories from developed and developing countries commit to either reducing greenhouse gas emissions 80 to 95 percent below 1990 levels or limiting per capita annual emissions to less than 2 metric tons by 2050. In other words, this is a club of regions that want to be more ambitious than any global climate agreement could ever be. New members joined the club before the COP, but many regions announced their adhesion in Paris. The signatories of the pact now represent more than 720 million people and $19.9 trillion in combined GDP, equivalent to more than a quarter of the global economy.

Before Paris, sub-national commitments focused primarily on local mitigation and adaption. However, at COP21, Quebec contributed Cdn$25 million to the developing countries, including $6 million through the multilateral Least Developed Countries Fund (LDCF). Quebec's announcement was followed by announcements of pledges from Belgian regional governments to the multilateral Green Climate Fund (GCF): €500,000 from the Brussels Capital Region, the Flanders Region €3.5 million, and the Walloon region €7 million (per year until 2020). The city of Paris also announced its own contribution of €1 million to the GCF. The logical next step is for other regional governments to follow the lead of Quebec, Paris and the Belgian regional governments in contributing multilateral climate finance.

The other group that could make a major difference in the fight against climate change is the private sector. On the one hand, at COP21, major investor groups explained how they were "decarbonizing" their portfolios to reduce exposure to carbon-related risks. This process includes selling companies that have high exposure to carbon-related risks and demanding greater transparency and reductions of carbon footprints from others. On the other hand, entrepreneurs like Bill Gates, Elon Musk, Michael Bloomberg and Jack Ma consider climate change not only to be a major threat to humanity, but also an enormous business opportunity. I expect to see growing pressure from the private sector on governments to establish a regulatory framework that is conducive to low carbon innovation and investment, including the introduction of meaningful prices for carbon throughout most of the world.

Linked trading systems. The Agreement makes provision for heterogeneous linkages, including international carbon markets (through "internationally transferred mitigation outcomes" – ITMOs). But it remains to be seen how these will be integrated. Suppose the system in Quebec has a marginal abatement cost of $5 and the one in California has a marginal cost of $15. Obviously, given these differences, trading can make both sides better off. But why should the parties take these differences as given? Why is it "right" for Quebec (in this example) to pay a lower cost than California? It is not clear how linked trading systems get around the bargaining problem. In addition, it is unclear how this linkage will be sustained over time. Once the systems are linked, who has an incentive to set a tougher target? This will just send money to the other party. Will the electorate at "home" support this? In Europe these problems were partially resolved by the Commission stepping in, but there is no equivalent institution in North America or elsewhere.

Civil Society One of the most incredible features of all COPS is the presence of civil society, mainly through over 1880 accredited non-government organizations (NGO's). These are grouped under some very odd acronyms, with NGO at the end of each: Environmental (ENGOs), Research (RINGO's), Business and Industry (BINGO's) and more. Some governments rely on NGO's to provide advice and support, while the most effective NGO's exert pressure on negotiators. One of the most visible and impressive NGOs in Paris was Climate Justice, led by Mary Robinson. It focuses on "the struggle to secure global justice for those people vulnerable to the impacts of climate change who are usually forgotten – the poor, the disempowered and the marginalised across the world". Their quiet lobbying efforts and their raucous "manifestations" next to the plenary hall demanding climate justice were a frequent reminder that the world was watching. Although this sort of pressure was exerted in other COPs, notably in Copenhagen, this time was different because everyone was ready to do a deal.

The Paris Agreement has provided a starting point, but left most of the heavy lifting to be done later. I expect the momentum to come now from sub-national governments, the private sector and civil society.