For two weeks starting today, negotiators gather in Paris for the annual climate-change meetings - officially, the 21st Conference of the Parties to the UN Framework Convention on Climate Change, and the 11th Meeting of the Parties to the Kyoto Protocol (COP 21/CMP11). The meeting is located in a sprawling conference center at the edge of Paris, on the grounds of the old Le Bourget airport - where Charles Lindbergh landed at the end of his trans-Atlantic flight in 1927.

UCLA's Emmett Institute has a strong delegation participating in the meeting. In addition to four faculty each here for part of the meeting (my co-director Ann Carlson and I, coexecutive director Cara Horowitz, and Prof. Alex Wang), we have brought a group of six UCLA law students. Working with partner organization Islands First, a non-profit that provides technical and capacity support for the governments of vulnerable small-island states, we are able to provide several of our students with the remarkable opportunity of providing support to the delegation of Palau, a small island state in Micronesia. In view of the large number of parallel sessions that occur at a negotiation - a serious burden for small nations with few government members on their delegations - "support" mainly means attending, note-taking, and reporting back on meetings that governmental members of the delegation are unable to attend, to keep them informed of the sometimes rapidly moving and confusing progression of events at the conference.

This meeting is expected to be a high-stakes event, the culmination of a several-year attempt to strengthen international climate agreements that began with adoption of the "Durban Platform for Enhanced Action" in 2011, following the disappointing outcome of the last big push for stronger international action, at Copenhagen in 2009. The broad approach being taken this round contrasts strongly with that of the Kyoto Protocol, which was organized around commitments by national governments to specified numerical reductions in their nations' emissions - a so-called 'top-down" approach. Instead, efforts this time are organized around national governments developing their own commitments, in the form of so-called "Intended nationally determined contributions" (INDCs). For those with a long view of international climate policy, this "bottom-up" approach represents a return, under different names, to the approach pursued in the first few years of the Framework Convention in the early 1990s - then called "pledge-and-review" - until this was abandoned in favor of binding numerical national targets in the Kyoto Protocol. In international politics as in fashion, (almost) everything old gets to be new again if you wait long enough.

More than 150 nations have now submitted INDCs, and several bodies have done technical assessments calculating how big a reduction these represent in global emissions, and how this compares to the targeted 2 C limit on global-average heating also adopted in the Durban Platform. (Note: this 2 C target is measured relative to the start of recent

anthropogenic heating in the 19th century: although there is widespread confusion on this point, the targeted limit is thus only 1.2 C hotter than we are now, in view of the roughly 0.8 C of heating that has already occurred since the turn of the 20th century.) Although there are differences in detail, the aggregate assessment is that the cuts pledged in the INDCs would reduce projected global heating this century, from the roughly 4.5 C projected without further efforts, to about 3.5 C. In other words, the INDCs - if fully implemented would represent a big improvement over doing nothing, but not nearly enough to reach the



targeted 2 C limit

As agreed at Durban, the aim of this year's meeting is to adopt a new agreement, under the Framework Convention, which is to have "legal force" and to come into effect by 2020. The point of its being under the Framework Convention is that it is separate from the Kyoto Protocol, which is still in force but which has been disabled from early in its life by, among other things, the fact that the United States never ratified and is thus not bound by its terms.

My Emmett Institute colleagues and I will be posting periodic updates as the meetings proceed. For now, I will simply preview a few likely highlights of the meeting.

First, to put things in context it is important to note one very big thing that will not be on the agenda in Paris: any negotiation of further mitigation commitments beyond those already stated by nations in their INDCs. Other than that, the most important and controversial items to be addressed in the meeting include the following. (Note that there are both linkages and overlaps between some of these topics):

- Mitigation: While numerical national mitigation limits are not on the agenda, other aspects of mitigation are:
 - What do the INDCs actually mean, and how are they reflected in negotiated agreement and decision text? In particular, what is their scope (do they only include mitigation, or also include adaptation, finance, and other actions or commitments? Is this scope specified or required?); their legal force (How

- binding are they? In what textual form and location are they recorded?); and associated procedural requirements (How often are they updated? Are they subject to any form of assessment and review?)
- How will the existing 2 C heating target be treated in the new agreement particularly in view of the large shortfall between INDC pledges and what would be required to meet the target, and indeed the increasing indications that the 2 C target is actually infeasible? Note that at the same time some states, particularly a group highly vulnerable to climate change, are pushing for official adoption of an even tighter heating limit, 1.5 C above pre-industrial.
- Adaptation: How should adaptation be reflected in the new agreement: is it just about resource transfers to help poor countries adapt, or is it more than that? What institutional framework does it require? How, if at all, should the most vulnerable nations (or groups) be distinguished within the agreement for purposes of adaptation?
- "Loss and Damage:" How, if at all, should the new agreement deal with those harms done by climate change that remain after (or despite) any reduction achieved by either mitigation or adaptation? (US Science Adviser John Holdren once famously said that the actually responses to climate change were not limited to mitigation and adaptation, but also included a third type, which he called "suffering": "Loss and Damage" is about the "suffering" part.) This has been a controversial element since introduced in Warsaw two years ago. Nations are highly divided on whether this element should be included in the agreement at all, whether it should be treated separately from adaptation, and what it means. I.e., is it (as some have proposed) a liability and compensation scheme for climate-change? And in that case, how can it be distinguished from unlimited liability for any harmful weather events?
- Finance: There are several channels for climate-related finance, private and public, already adopted, including the pledges made at Copenhagen for \$100 billion of financial flows to be provided by 2020, and new announcements today, both by heads of government and by a group of billionaires under a new "breakthrough energy coalition." This meeting will be dealing again with the perennial questions of climate finance: how much, from whom (private vs public vs various hybrid forms; and to the extent public, from which countries and with what form of obligations?), to whom, for what purposes, and with what associated conditions or requirements on both donor and recipient side?
- Transparency: What form of reporting, assessment, and review applies parties' actions or commitments under existing and new agreements? What actions and commitments are subject to what provisions for transparency? And are transparency requirements differentiated - i.e., different for different countries - or the same for all?
- Differentiation: One of the principles stated in the Framework Convention is that of

"Common but Differentiated Responsibility" - that all nations have a common responsibility to contribute to dealing with climate change, but that the specifics of these responsibilities are differentiated according to national circumstances, including most prominently their development status. But how to operationalize this priniciple, and how it should evolve over time or in response to changes in individual national circumstances, remain deeply contested. You can think of the shift from a top-down approach to mitigation commitments in the Kyoto Protocol to the present approach based on freely nationally determined INDCs as a move to "infinite differentiation" since each state gets to freely choose its own commitment level. But questions of differentiation remain unresolved and contentious across every element of the proposed agreement: What elements are subject to differentiation (i.e, mitigation, adaptation, finance, transparency requirements, reporting, and/or other procedural obligations)? And how much and in what ways should these be differentiated (i.e., into just two categories, developed vs. developing? With more categories or finer differentiation? Infinite differentiation? And as you move substantive commitments toward ever-finer differentiation, how does this comport with all nations having a "common" responsibility?)

• And finally, the Legal Status of the agreement: The Durban platform agreed that these negotiations were to adopt "a protocol, another legal instrument or an agreed outcome with legal force under the Convention applicable to all Parties." But current political divisions in the United States - as vividly illustrated today by leaders of both the Senate and House of Representatives making statements intended to call into question the administration's ability to adopt and implement strong climate agreements - put limits on what the United States is able to commit to. In view of how much the Kyoto Protocol was disabled by the absence of the United States, it is crucial as a practical matter that the US be a full partner in whatever agreement is negotiated here. But the idea of writing new binding commitments into a treaty, which would require the advice and consent of the Senate prior to US ratification, is a non-starter, however much some nations may want it. As a result, the negotiation here is over how close to a legally binding treaty, for what specific provisions, it is possible to get while still making it legally and politically possible for the United States to join.