The annual Conference of Parties of the UN Framework Convention on Climate Change opened this week in Lima, Peru, drawing delegates from around the world, including a few from UCLA Law. I am in Lima along with Legal Planet blogger Jesse Lueders and three students from our UCLA Environmental Law Clinic, Sarah Kozal ’16, Jacob Cohen ’15, and Sunny Tsou ’15. We are here with clinic client Islands First, a nonprofit that provides support to small island developing states, or SIDS. SIDS often have tremendous exposure to the impacts of greenhouse gas emissions, such as sea level rise and ocean acidification; some of these low-lying countries face the very real prospect of forced relocation if sea level rise is not controlled. At the same time, SIDS bear the least responsibility for the creation of the problem and face significant constraints on the resources they can bring to these international talks. Islands First provides these countries with additional capacity and legal support in multilateral environmental negotiations, helping them to work toward strong outcomes.

The aims of the Lima COP are diverse and a lot is at stake here. Parties are sorting through details of the (shrinking) obligations under the Kyoto Protocol’s second commitment period. Parties are also developing the contours of a new post-Kyoto Protocol agreement, to be signed in Paris at next year’s COP and to take effect in 2020. And, recognizing the need for urgent action even before 2020, parties are working to hasten and enhance action on mitigation, adaptation, finance, capacity building, and other pressing issues between now and 2020. Delegates are pursuing these aims with a strong sense, clear from the chatter in the halls, that in this work (and especially in Paris) they need to avoid the pitfalls seen in Copenhagen, at the much-anticipated 2009 COP. Many developing countries, especially, want these outcomes to be the product of transparent negotiations, not backroom dealings.

In another of the many strands of the negotiations here, parties are reexamining one of the Framework Convention’s most central goals, that of keeping the long-term global average temperature from rising more than two degrees Celsius higher than the pre-industrial average. The Framework Convention enshrined the two-degree goal decades ago, when climate science was less well advanced. In recent years, many parties have called for a downward revision of the long-term goal to 1.5 degrees C, noting that observed impacts have been severe even at current levels of warming of about half that amount (0.8 degrees). In response, parties agreed in 2012 to a review aimed at gathering scientific and technical information on, among other things, the appropriateness of the two-degree goal. The review has been underway for two years and will conclude in 2015.

It is too early to know what the outcome of this review will be. But the most remarkable, and stark, statements I have heard in these talks came during a dialogue between lead IPCC scientists and party negotiators on the question of the appropriate long-term warming goal. Dr. Hans-Otto Portner presented from the IPCC on the difference in impacts between 1.5 degrees of warming and 2 degrees, focusing on our ability to prevent unacceptable consequences for ecosystems and food production. He stated that in a world of 1.5 degrees of warming, some adaptation will be possible. We may lose up to half of the world's coral reefs, but half may remain; sea level rise may remain below 1 meter; ocean acidification impacts may remain at moderate levels; and some arctic sea ice may remain. In a two-degree world, however, he said that significant ecosystems will be unable to adapt**.** Coral reefs and sea ice systems may be so severely impacted as to be "entirely marginalized," and global crop production would be "exposed to high risk." Dr. Peter Tschakert added that in a two-degree world, there would be "essentially no or very limited potential for adaptation" for some indigenous and unique communities.

Sobering thoughts for SIDS countries and all others, in light of current emissions and policy trends.