

Optimism Faces Grave Realities at Climate Talks

By CORAL DAVENPORT NOV. 30, 2014

WASHINGTON — After more than two decades of trying but failing to forge a global pact to halt climate change, United Nations negotiators gathering in South America this week are expressing a new optimism that they may finally achieve the elusive deal.

Even with a deal to stop the current rate of greenhouse gas emissions, scientists warn, the world will become increasingly unpleasant. Without a deal, they say, the world could eventually become uninhabitable for humans.

For the next two weeks, thousands of diplomats from around the globe will gather in Lima, Peru, for a United Nations summit meeting to draft an agreement intended to stop the global rise of planet-warming greenhouse gases.

The meeting comes just weeks after a [landmark announcement](#) by President Obama and President Xi Jinping of China committing the world's two largest carbon polluters to cuts in their emissions. United Nations negotiators say they believe that advancement could end a longstanding impasse in the climate talks, spurring other countries to sign similar commitments.

Photo



A child walking near her home with a coal-fired power plant in the background in Beijing, China. Credit Kevin Frayer/Getty Images

But while scientists and climate-policy experts welcome the new momentum ahead of the Lima talks, they warn that it now may be impossible to prevent the temperature of the planet's atmosphere from rising by 3.6 degrees Fahrenheit. According to a large body of scientific research, that is the tipping

point at which the world will be locked into a near-term future of drought, food and water shortages, melting ice sheets, shrinking glaciers, rising sea levels and widespread flooding — events that could harm the world’s population and economy.

Recent reports show that there may be no way to prevent the planet’s temperature from rising, given the current level of greenhouse gases already in the atmosphere and the projected rate of emissions expected to continue before any new deal is carried out.

That fact is driving the urgency of the Lima talks, which are expected to produce a draft document, to be made final over the next year and signed by world leaders in Paris in December 2015.

While a breach of the 3.6 degree threshold appears inevitable, scientists say that United Nations negotiators should not give up on their efforts to cut emissions. At stake now, they say, is the difference between a newly unpleasant world and an uninhabitable one.

“I was encouraged by the U.S.-China agreement,” said Michael Oppenheimer, a professor of geosciences and international affairs at Princeton University and a member of the United Nations Intergovernmental Panel on Climate Change, a global body of scientists that produces regular reports on the state of climate science. But he expressed doubts that the threshold rise in global temperature could be prevented.

“What’s already baked in are substantial changes to ecosystems, large-scale transformations,” Mr. Oppenheimer said. He cited losses of coral reef systems and ice sheets, and lowering crop yields.

Still, absent a deal, “Things could get a lot worse,” Mr. Oppenheimer added. Beyond the 3.6 degree threshold, he said, the aggregate cost “to the global economy — rich countries as well as poor countries — rises rapidly.”

Photo



Felipe Calderón, the chairman of the Global Commission on the Economy and Climate and former president of Mexico. Credit Richard Drew/Associated Press

The objective now, negotiators say, is to stave off atmospheric temperature increases of 4 to 10 degrees by the end of the century; at that point, they say, the planet could become increasingly uninhabitable. Officials at the National Oceanic and Atmospheric Administration are already reporting that 2014 appears likely to be the warmest year on record.

Since 1992, the United Nations has convened an annual climate change summit meeting aimed at forging a deal to curb greenhouse gases, which are produced chiefly by burning coal for electricity and gasoline for transportation. But previous agreements, such as the 1997 Kyoto Protocol, included no requirements that developing nations, such as India and China, cut their emissions. And until now, the United States has never headed into those summit meetings with a domestic climate change policy in place.

This spring, a report by 13 federal agencies concluded that climate change would harm the American economy by increasing food prices, insurance rates and financial volatility. In China, the central government has sought to quell citizen protests related to coal pollution.

In June, Mr. Obama [announced](#) a new Environmental Protection Agency rule forcing major emissions cuts from coal-fired power plants. State Department negotiators took the decision to China, hoping to broker a deal for a similar offer of domestic action. That led to November's joint announcement in Beijing: The United States will cut its emissions up to 28 percent by 2025, while China will decrease its emissions by or before 2030.

“Our sense is that this will resonate in the broader climate community, give momentum to the negotiations and spur countries to come forward with their own targets,” said Todd Stern, Mr. Obama's lead climate change negotiator. “The two historic antagonists, the biggest players, announcing they'll work together.”

Other negotiators agree. “The prospects are so much better than they've ever been,” said Felipe Calderón, the former president of Mexico and chairman of the Global Commission on the Economy and Climate, a research organization.

Photographs: Rising Seas

The aim of negotiators in Lima is, for the first time, to produce an agreement in which every nation commits to a domestic plan to reduce greenhouse gas emissions, along the model of the United States-China agreement. Negotiators expect that by next March, governments will make announcements similar to those made by the United States and China.

The idea is for each country to cut emissions at a level that it can realistically achieve, but in keeping with domestic political and economic constraints. World leaders would sign a deal in Paris next year committing all those nations to their cuts, including a provision that the nations regularly reconvene to further reduce their emissions.

The problem is that climate experts say it almost certainly will not happen fast enough. A November report by the United Nations Environment Program concluded that in order to avoid the 3.6 degree increase, global emissions must peak within the next 10 years, going down to half of current levels by midcentury.

But the deal being drafted in Lima will not even be enacted until 2020. And the structure of the emerging deal — allowing each country to commit to what it can realistically achieve, given each nation's domestic politics — means that the initial cuts by countries will not be as stringent as what scientists say is required.

China's plan calls for its emissions to peak in 2030. Government officials in India, the world's third-largest carbon polluter, have said they do not expect to see their emissions decline until at least 2040.

While Mr. Obama has committed to United Nations emissions cuts through 2025, there is no way to know if his successor will continue on that path.

That reality is already setting in among low-lying island nations, like the Marshall Islands, where rising seas are soaking coastal soil, killing crops and contaminating fresh water supplies.

“The groundwater that supports our food crops is becoming inundated with salt,” said Tony A. deBrum, foreign minister of the Marshall Islands. “The green is becoming brown.”

Many island nations are looking into buying farmland in other countries to grow food and, eventually, to relocate their populations.

In Lima, those countries are expected to demand that a final deal include aid to help them adapt to the climate impacts that have already arrived.