

The Paris climate agreement is entering into force. Now comes the hard part.

By [Chris Mooney](#) and [Brady Dennis](#) October 4

The European Parliament [voted overwhelmingly](#) Tuesday to ratify the Paris climate accord, a move that will make the sweeping international agreement a legal reality long before even those who negotiated it expected.

“We made the deal in Europe, and we make it a reality in Europe,” Miguel Arias Cañete, the E.U.’s climate and energy commissioner, [said](#) on Twitter after the vote.

The Paris agreement enters into force when at least 55 countries, representing 55 percent of global emissions, have joined it. Before Tuesday, those numbers stood at 62 nations and just shy of 52 percent of emissions, thanks to ratification by India over the weekend.

The nations of the European Union collectively are responsible for 12.1 percent of the planet’s emissions, more than enough to cross the 55 percent threshold. But although the E.U. will now join as a whole — which officially could take place later this week at the United Nations — only seven of its member countries have individually ratified the agreement thus far. That includes big emitters Germany ([2.56 percent](#) of global emissions) and France (1.34 percent), though, which should be more than enough to bring the deal across the goal line.

There is then a 30-day period before the agreement legally enters into force. The milestone drew wide celebration from supporters on Tuesday.

“The entry into force of the Paris agreement less than one year after its signature is a massive achievement, given that it took eight years for the Kyoto protocol,” European Parliament President Martin Schulz said in a [statement](#).

Throughout much of 2016, world leaders from President Obama to U.N. Secretary-General Ban Ki-moon have pushed to bring the Paris agreement into force as early as possible, with the United States and China leading the drive. But even as the accord was being negotiated last December in Paris, few expected that the world would ratify it so rapidly.

Now the focus inevitably shifts to more thorny issues — namely, how the world will actually get to a place where it’s possible to limit the warming of the planet to “well below” 2 degrees Celsius above pre-industrial levels, as the Paris agreement calls for. It’s far easier for countries to sign onto an agreement on paper than it is for them to meet their pledges to reduce carbon-dioxide emissions, let alone increase those ambitions over time.

Scientific observers broadly agree that the individual pledges made by countries under the Paris agreement are not strong enough to stave off the worst effects of climate change. Even as countries have moved rapidly to ratify the Paris accord, the window for hitting the agreement’s targets is closing. Or, according to the more pessimistic voices, it could already be closed.

Among those is former NASA scientist James Hansen, who released a [paper](#) Tuesday declaring that the world, at 1.3 degrees Celsius above what he terms pre-industrial levels in 2016, is likely already well past any climate safe zone. Hansen believes that atmospheric carbon dioxide concentrations are far too high already and that the planet is as hot as it was in the last interglacial period, over 100,000 years ago. He argues that to stabilize the planet at 1.5 C or 2 degrees C now probably means developing expensive new technologies, which do not exist at scale, to actually remove carbon dioxide from the atmosphere.

Models showing how we can keep warming under 1.5 or 2 degrees Celsius “now have to include enormous negative CO2 emissions,” said Hansen in a press call Monday. “That means extraction of CO2 from the air, if you want to achieve the goals, which, it’s now agreed, should be achieved.” But he said the cost to develop such technologies at scale could run in the hundreds of trillions of dollars, and “it’s really potentially putting young people in a situation that would be out of their control, because it’s not clear that they will have the ability to take such actions.”

Other researchers, if not quite as dire as Hansen, also depicted the world as unlikely to achieve the Paris goals, despite the broad support for the climate accord.

Jorgen Olesen, a professor at Aarhus University in Denmark who has written extensively about climate change, said it is “clearly a positive” that nations came together for the Paris agreement and have moved rapidly to ratify it. “[But] the objectives they set themselves in Paris are unachievable, given real politics,” he said.

He said if the world were able to move rapidly to put in place new technologies and phase out sources of pollution, without any opposition or regard for the resources necessary to pull that off, then meeting the 2-degree target detailed in the Paris agreement, could happen. But that overlooks reality, he said.

“The politicians that agreed to this are not the ones that have to achieve the targets in the end,” Olesen said. “It’s better to have an ambitious target than no target. But we also really need to put a bit of realism into it. We do live in a world where we are not going to meet those targets.”

Olesen said that doesn’t mean nations shouldn’t push hard to cut carbon emissions, conserve energy and stave off as much global warming as possible in coming years. But he said there also needs to be significant investment in adaptation measures. “It’s too late to only think about mitigation,” he said. “We probably need to adapt to a 3 or 4 degree world.”

Glen Peters, a professor at the Center for International Climate and Environmental Research in Oslo, agreed.

“At the moment, most studies suggest the current pledges put us on a pathway to around 3 [degrees Celsius],” he said. “The current pledges move us away from high end scenarios like 4C, but they are not sufficient to keep us below 2C.”

A group of scientists led by Robert Watson, a former chair of the United Nations’ Intergovernmental Panel on Climate Change, [warned last week](#) that the world could cross 1.5 degrees Celsius permanently by 2030 — in less than 15 years — and that the emissions committing us to that outcome could happen considerably sooner than that. With each successive year, the world adds over 50 billion tons of carbon dioxide equivalents to the atmosphere.

The question is what, if anything, the world will do to change that trajectory. That could become a topic at a [United Nations meeting](#) next month in Marrakesh, Morocco, in which countries are likely to hold the first official meeting under the ratified Paris agreement. But it remains unclear how quickly countries will ramp up efforts to limit their emissions. [Important provisions](#) within the Paris agreement, aimed at nudging nations to raise their ambition to cut emissions, don’t kick in for years. There is supposed to be a “facilitative dialogue” in

2018 to consider whether the world is on course to meet the agreement, followed by another global assessment in 2023. In addition, countries will have to update their pledges to reduce emissions by 2020.

But none of this means that any country is going to ramp up its ambition fast. “With fast ratification, large emitters mostly signal that they are willing to adhere to what they’ve promised,” said Oliver Geden, who leads the EU division of the German Institute for International and Security Affairs, by email. “I’m not aware of a major industrialized country or emerging economy that has concrete plans to strengthen [its efforts].”

The success of the Paris agreement also hinges on whether countries continue to have the political will to live up to their promises. In the United States, the looming presidential election holds huge consequences when it comes to the government’s approach to climate change.

Hillary Clinton has steadfastly supported the Paris accord and has vowed to continue trying to slash carbon emissions. Donald Trump has repeatedly called climate change a “hoax” and has said he would withdraw from the Paris agreement. While that might be legally complicated given that the United States has ratified the deal, a Trump administration could essentially ignore the pledges made under President Obama.

“The Paris agreement will now officially enter into force just days before the U.S. elections, highlighting the stakes of the vote for effective climate protection,” said Paul Bledsoe, a former climate adviser in the Bill Clinton White House. “Even if Trump can’t ‘withdraw’ the U.S. from the Paris agreement right away, as he has threatened, he would attempt to severely undermine U.S. emissions mitigation, striking a blow to global efforts.”

In a recent interview with The Post, Secretary of State John Kerry acknowledged that the ratification of the Paris agreement itself does not guarantee the goal of less global warming.

“What I said in Paris when it passed and we all spoke, [is that] it’s a signal to the marketplace, it’s not a solution in and of itself,” Kerry said, adding that the real transformation will happen as private investors pour money into new technologies and alternative energy sources. “There’s a lot of investment — speculative and otherwise — that’s trying to push the curve on this. I don’t believe that government is going to solve this. Government is going to be the catalyst.”

But Kerry also agreed that the clock is ticking.

“We’re behind the curve,” he said. “We’ve got to move faster, because the rate of change is just so dynamic it’s scary.”