UNITED STATES PLEDGES DRAMATIC CUTS TO GREENHOUSE EMISSIONS

But researchers fear the commitment to roughly halve emissions isn't enough to curb climate change.

By Jeff Tollefson

S President Joe Biden opened a virtual White House climate summit on 22 April by announcing an ambitious new commitment to cut US greenhouse-gas emissions to at least 50% below 2005 levels by the end of this decade. The pledge is the most aggressive made by the country yet, extending and strengthening a commitment made under former president Barack Obama to cut emissions by at least 26% below 2005 levels by 2025.

The announcement marks a radical shift from the past four years under former president Donald Trump, who pulled the United States out of the 2015 Paris climate accord and sought to protect the nation's struggling coal industry.

Calling global warming "the existential crisis of our times", Biden said the United States is resolved to act, and urged fellow world leaders to join the battle. "No nation can solve this crisis on our own," Biden said. All countries, he added, "have to step up".

Forty world leaders attended the US

summit, held over two days, with the goal of building momentum for international action on climate.

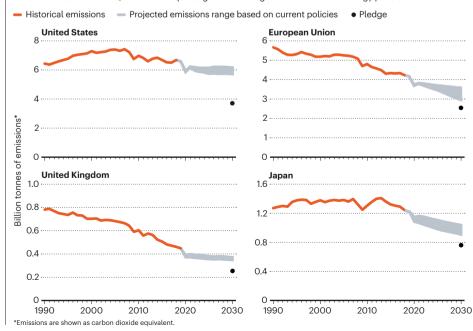
The new US target is roughly in line with recent commitments by the European Union and a growing cadre of nations that have pledged to halve their emissions by 2030 as a crucial first step on the path to full decarbonization by mid-century. It is also in line with calls from scientists and environmentalists who lobbied the administration for an aggressive commitment during the run-up to last week's summit.

"This level of ambition is what's necessary to inspire other big emitters to go further and curb their own emissions by 2030," says Marcene Mitchell, senior vice-president for climate change at the wildlife charity WWF in Washington DC. The next step, says Mitchell, is for Biden to mobilize society and make the commitment a reality.

Although his climate team is still working out the details, Biden has outlined in broad strokes how he will do this. In addition to decarbonizing the electricity sector by 2035 and ramping up the use of electric vehicles to

NEW COMMITMENTS

The United States held a climate summit last week at which it pledged to cut its greenhouse-gas emissions by at least 50% below 2005 levels by 2030. The European Union and various countries have also made new climate commitments, which will require significant changes in economic and energy policies.



cut transportation emissions, his plan seeks to harness new technologies to curb industrial emissions while protecting forests and natural ecosystems that pull carbon out of the atmosphere. As a down payment, Biden last month put forward a massive US\$2.3-trillion package that would invest heavily in clean-energy technologies, infrastructure and jobs.

Falling short

At the Paris climate meeting in 2015, governments committed to limit global warming to 1.5–2°C above pre-industrial levels, in an effort to prevent a cascade of potential catastrophic impacts, including increases in extreme weather, the destruction of natural ecosystems and damages to agricultural systems.

Although many governments have begun to bend the emissions curve downwards by adopting climate policies that advance clean-energy development, international commitments have fallen well short of that 2015 goal. On the basis of current policies, the world is currently on track for around a 3°C rise, according to Climate Action Tracker, an international consortium of scientists and policy specialists that monitors efforts to implement the Paris accord.

The White House climate summit is the first stop this year on the road to a United Nations meeting in November in Glasgow, UK, where governments are expected to formalize their new climate commitments. The world's largest emitter, China, pledged last September to halt its growth in carbon emissions by 2030 and achieve carbon neutrality by 2060. Last December, the European Union announced its goal of curbing emissions to 55% below 1990 levels by 2030.

Climate observers say the US summit has helped to inject new momentum into international negotiations: Japan and the United Kingdom are among a group of nations that announced new climate goals last week (see 'New commitments').

Climate Action Tracker is still assessing the overall impact of these pledges, but they are probably not enough to hit the 1.5 °C goal, models show. Looking at climate policies that governments have already put in place, the group projects that global emissions will rise to the equivalent of between 51 billion and 55 billion tonnes of carbon dioxide in 2030, roughly twice the amount needed to keep the world on track to meet the 1.5 °C target. Nonetheless, scientists say the new commitments will help to bend the curve further. If achieved, the US pledge alone would curb global emissions in 2030 by roughly 2 billion tonnes.

"There's a long way to go, but I'm more optimistic than I was a few months ago," says Bill Hare, who heads Climate Analytics, a nonprofit consultancy in Berlin that is a member of the Climate Action Tracker consortium.