

# News in focus



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Joe Biden addressed Americans on 7 November, after major media outlets called the presidential election in his favour.

## SCIENTISTS RELIEVED AS JOE BIDEN WINS TIGHT US PRESIDENTIAL ELECTION

The president-elect has the opportunity to reverse four years of anti-science policies – but he has a hard road ahead as he inherits a nation divided.

By Jeff Tollefson

**J**oe Biden will soon be president of the United States, and scientists the world over are breathing a collective sigh of relief. But concerns remain: nearly half of voters cast their ballots for President Donald Trump, whose actions have repeatedly undermined science. Biden will have his work cut out for him in January as he takes the helm of a politically polarized nation.

“Our long national nightmare is over,” says Alta Charo, a bioethicist at the University of Wisconsin Law School in Madison, quoting

president Gerald Ford’s famous 1974 remarks about his predecessor Richard Nixon’s scandal-ridden term. “I couldn’t say it any better than that.”

Although Trump and his team have launched legal challenges in some states, major media outlets in the United States declared Biden the winner on 7 November, after confirming that he had captured sufficient electoral-college votes. Once Biden takes office on 20 January, he will have an opportunity to reverse many policies introduced by the Trump administration that were damaging to science and public health. This includes actions on

climate change, immigration and the COVID-19 pandemic, which could claim more than a quarter of a million lives in the United States before Trump leaves office in January.

Researchers are hopeful that much of the other damage can be repaired. With Trump out of the picture, says Pervez Hoodbhoy, a physicist and nuclear-proliferation specialist based in Islamabad, “instead of dog-eat-dog, maybe we will have a modicum of international cooperation, greater adherence to laws and treaties, more civility in politics across the globe, less ‘fake news’, more smiles and less anger”.

Biden, a Democrat who previously served as



Kamala Harris will be the first woman to ever ascend to vice-presidency in the United States.

vice-president under former president Barack Obama, has promised to ramp up US test-and-trace programmes to help bring the coronavirus under control, to rejoin the 2015 Paris climate agreement to fight global warming, and to reverse visa restrictions that have made the United States a less desirable destination for foreign researchers. Biden's vice-president elect, Kamala Harris, an attorney and US senator from California, will be the first woman to achieve one of the top two offices in the country. She is also the first Black woman and the first Asian American to be elected vice-president, in a country riven by racial tensions.

"It is testament to the strengths and resilience of US science that it has weathered the past four years," says James Wilsdon, a social scientist at the University of Sheffield, UK. "It can look forward now to a period of much-needed stability."

### Top priorities

One of Biden's first orders of business will be to launch a more aggressive pandemic response. In fact, shortly after being declared winners of the election, Biden and Harris announced a COVID Advisory Board of public-health experts who will help them curb the pandemic. On 6 November, the United States reported more than 130,000 new coronavirus infections in a single day – a record for the entire globe.

Trump has sought to downplay COVID-19, while opposing efforts to contain the coronavirus as too costly. By contrast, Biden's team has committed to working with state- and local-level officials to implement mask mandates nationwide, and to strengthening public-health facilities.

Biden's team has also promised to make decisions grounded in science. Throughout

the pandemic, the Trump administration has repeatedly sidelined government scientists at public-health agencies such as the Centers for Disease Control and Prevention. With Biden in charge, says Charo, "there's a wide range of government agencies that now are going to get a chance to do their jobs properly".

Biden's administration will also reopen global partnerships in its fight against the coronavirus. Trump pulled the United States out of the World Health Organization earlier this year, criticizing the international agency for supporting China, where the first cases of COVID-19 were reported. "Joe Biden and Kamala Harris understand that no country can face our current challenges alone, and

**"There's a wide range of government agencies that now are going to get a chance to do their jobs properly."**

hopefully will re-engage and help re-form key science-based multilateral institutions," says Marga Gual Soler, an adviser on science diplomacy and policy to the European Union.

Another high priority for Biden will be to reverse many of Trump's policies that affect climate, the environment and public health.

At the top of the docket is the Paris climate agreement. The United States formally withdrew from this accord on 4 November, but Biden has said he will rejoin the pact after taking office in January. Biden and Harris also campaigned on a US\$2-trillion plan to boost clean energy, modernize infrastructure and curb greenhouse-gas emissions.

Biden's election holds particular significance

for scientists at the US Environmental Protection Agency (EPA), which has suffered under Trump's efforts to roll back regulations, bolster industry influence and undermine the use of science in policymaking.

"The Trump administration tried to mutate the DNA of the organization," says Dan Costa, a toxicologist who headed the agency's air, climate and energy research programme until January 2018, and is one of numerous veteran scientists at the EPA who ultimately chose to depart during Trump's tenure. It will take a while for the agency to recover, but a cloud has lifted, says Costa. "I'm sure people working at the EPA are breathing a sigh of relief."

### A tense election

A record election turnout shows that "democracy beats deep in the heart of America", Biden said in a statement. "It's time to put the anger and the harsh rhetoric behind us and come together as a nation," he said. "It's time for America to unite. And to heal." As *Nature* went to press, Trump had not conceded the election, and had said it was "far from over".

"I'm still nervous," says Ali Nouri, a molecular biologist and president of the Federation of American Scientists in Washington DC. "It's still not clear to what extent the president is going to contest the election. I think, unfortunately, he has undermined some core democratic principles that we've always adhered to in this country."

The closer-than-expected vote hardly served as the rebuke of Trump that many scientists were hoping for; nor did it provide a 'blue wave' of Democratic appointments across Congress that would have made it easier for Biden to advance his scientific agenda. Democrats lost seats in the House of Representatives, although they are expected to continue holding on to a majority. And they might not wrest control of the currently Republican-led Senate, where the final roster will not be decided until Georgia holds a pair of run-off elections in January.

Although Biden's election represents an imminent end to a presidency that often disregarded truth, science and evidence, many scientists fear that Trump will continue to haunt the United States well after he has left office.

"The political defeat of Trump is enormously important. But this is not a repudiation of this larger assault on democratic civility in the United States," says Zia Mian, a physicist and co-director of the Program in Science and Global Security at Princeton University in New Jersey. Trump has undermined core values of truth and equality, Mian says, and without those, "democratic debate is not possible".

Additional reporting by Davide Castelvecchi, Heidi Ledford, Nidhi Subbaraman and Alexandra Witze.

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