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COP26 climate pledges: What scientists think so far

Nations have promised to end deforestation, curb methane emissions and stop public investment in coal power. Researchers warn that the real work of COP26 is yet to come.

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Methane burns at an oil pit. Among the key pledges so far at COP26 is an agreement to cut methane emissions by 30% by 2030. Credit: Orjan F. Ellingvag/Corbis via Getty

The first few days of the 26th United Nations Climate Change Conference of the Parties (COP26) have seen a flurry of announcements from world leaders promising to tackle climate change — from plans to phase out public finance for coal-fired power, to a pledge to end deforestation. This year, many big names — including US President Joe Biden and Indian Prime Minister Narendra Modi — attended the first two days of the conference to make big announcements.



COP26 climate summit: A scientists' guide to a momentous meeting

This is different from what has happened at most previous COP summits, says Beth Martin, a specialist in climate negotiation who is part of [RINGO](#) (Research and Independent Non-Governmental Organizations), a network of organizations allowed to observe the COP26 negotiations. Usually, the highest-profile figures aren't present during the first week, but arrive near the end of the meeting to help bridge differences in time for an agreed statement, and for the obligatory 'UN family photo'.

Nature asked researchers what they think of the pledges that have been made so far, as negotiators from some 200 countries prepare to dive into more detailed talks.

Methane emissions

One of the key developments in the first week was an agreement to curb emissions of methane, a powerful greenhouse gas that is second only to carbon dioxide in terms of its impact on the climate. Led by the United States and the European Union, the [global methane pledge](#) seeks to curb methane emissions by 30% by 2030, and has been signed by more than 100 countries.



Control methane to slow global warming — fast

“Obviously, as a scientist you’d say, ‘Well, a 50% reduction in the methane emissions by 2030 would be even better,’ but it’s a good start,” says Tim Lenton, who heads the Global Systems Institute at the University of

Exeter, UK. “It’s an additional lever that could really help us limit warming.”

Research has shown¹ that curbing methane emissions using existing technologies [could shave up to 0.5 °C off global temperatures by 2100](#). As with carbon dioxide, however, limiting methane emissions will not happen on its own.

With his climate agenda facing challenges in Congress, Biden made methane a centrepiece of his commitments in Glasgow by announcing a new regulation to curb methane emissions from the oil and gas industry. Put forward this week by the US Environmental Protection Agency, the rule would [require companies to curb methane emissions](#) from their facilities by 74% over the coming decade, compared with 2005 levels. If implemented as proposed, it could prevent the release of some 37 million tonnes of methane by 2035 — equivalent to more than the annual carbon emissions from the nation’s fleets of passenger vehicles and commercial aircraft.

India’s net-zero goal

After delaying expected updates to India’s climate commitments by more than a year, Modi captured the world’s attention early in the summit by announcing

that [his country would seek to achieve net-zero emissions by 2070](#). The deadline is decades after that of many other countries that have made net-zero commitments, and it remains unclear whether India is committing to curbing just carbon dioxide emissions, or the broader category of greenhouse-gas emissions. But scientists say the announcement could mark a significant step forward if India follows through.



Scientists cheer India's ambitious carbon-zero climate pledge

“We are definitely taken by surprise: this is much more than we were expecting to hear,” says Ulka Kelkar, an economist in Bengaluru who heads the Indian climate

programme for the World Resources Institute, an environmental think tank based in Washington DC.

Many scientists remain sceptical about mid-century net-zero pledges, in part because it's easy to make long-term promises but hard to make the difficult short-term decisions that are required to meet those pledges. But India's commitment includes measurable near-term targets, such as a pledge to provide 50% of the nation's power through renewable resources and to reduce projected carbon emissions by one billion tonnes of carbon dioxide by 2030.

Questions remain about how these targets will be defined and measured, but models indicate that there is a 50% chance such net-zero pledges [could limit global warming to 2 °C or less](#), if fully implemented by all countries.



More than 130 countries have agreed to halt and reverse deforestation by 2030. Credit: Joao Laet/AFP via Getty

Climate cash

Among a cascade of climate-finance announcements this week is a pledge from more than 450 organizations in the financial sector — including banks, fund managers and insurance companies — in 45 countries to [move US\\$130 trillion of funds under their control into investments where the recipient is committed to net-zero emissions by 2050.](#)

The pledging institutions, which are part of the Glasgow Financial Alliance for Net Zero, have not yet specified

interim targets or timetables to achieve this goal. On 1 November, UN secretary-general António Guterres announced that a [group of independent experts](#) would be convened to propose standards for such commitments to net-zero emissions.



The broken \$100-billion promise of climate finance – and how to fix it

Governments also announced [new investments in clean technologies](#). And more than 40 countries, including the United Kingdom, Poland, South Korea and Vietnam, have [committed to phasing out coal power](#) in the 2030s (for major economies) or 2040s (globally), and to

stopping public funding for new coal-fired power plants.

“All of this is significant,” says Cristián Samper, an ecologist and president of the Wildlife Conservation Society in New York City. “The involvement of the financial sector and of ministers of finance and energy” in the meeting “is a game-changer”.

However, the announcements have been overshadowed by governments’ [failure to meet a 2009 pledge to provide \\$100 billion annually](#) in climate finance for low- and middle-income countries by 2020. Reports suggest that [it will take another two years to reach this goal](#), and that around 70% of the finance will be provided as loans.

“We all assumed it would be grant finance. We didn’t pay attention to the fine print or expect that developed countries would hide behind loans,” says climate economist Tariq Banuri, a former director of sustainable development at the UN.

Ending deforestation

More than 130 countries have [pledged to halt and reverse forest-loss and land degradation](#) by 2030. The signatories, which include Brazil, the Democratic

Republic of the Congo and Indonesia, are home to 90% of the world's forests.

It is not the first such commitment: the 2014 [New York Declaration on Forests](#), signed by a broad coalition of nearly 200 countries, regional governments, companies, indigenous groups and others, called for halving deforestation by 2020 and “striving” to end it by 2030.



The United Nations must get its new biodiversity targets right

There is also a [long-standing UN pledge to slow down and eventually reverse the loss of biodiversity](#). But this

remains unfulfilled and there is no official monitoring. Researchers say the latest target is unlikely to be met without an enforcement mechanism.

Separately, a group of high-income countries has pledged [\\$12 billion in public finance for forest protection between 2021 and 2025](#), but has not specified how the funding will be provided. A statement from the group, which includes Canada, the United States, the United Kingdom and EU countries, says governments will “work closely with the private sector” to “leverage vital funding from private sources to deliver change at scale”. This suggests that the finance is likely to be dominated by loans.

Still, Samper says that there are reasons to be optimistic. Few previous climate COPs discussed nature and forests on the scale now seen in Glasgow. In the past, if biodiversity was mentioned at a climate meeting, “it was like the Martians had landed”, he says, because biodiversity and climate are treated as separate challenges by the UN. “We’ve never seen this much attention. It could be a pivot point.”

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References

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