



# Mind The Gap: Pledges At COP26 Give Hope But Significant Shortfall Still Exists

November 18, 2021

# **Key Takeaways**

- More than 190 countries have agreed to the Glasgow Climate Pact at COP26 that, among other things, pledges to "phase down" coal, said to be the biggest industrial source of greenhouse gas emissions.
- Although countries agreed to ratchet up their emissions reduction pledges next year to help keep global temperatures to no more than 1.5 degrees Celsius, the gap between what scientists believe to be a safe limit and the existing trajectory of global temperature remains significant.
- Climate-related financial disclosures are expected to become more robust and rules to establish market mechanisms for trading carbon were agreed upon, potentially opening the door for more capital to flow into emissions reduction projects.
- For the first-time, countries agreed to a quantifiable target on adaptation finance--equal to \$40 billion per year by 2025--though this is only a fraction of developing countries' estimated adaptation needs.

The Glasgow Climate Pact was agreed upon on Nov. 13--a day after the official COP26 deadline expired--and has largely been hailed as a good compromise deal by commentators. It refers to coal for the first time in the U.N. process. It asks for countries to come back with stronger climate plans in 2022, strengthening the normal five-year ratcheting-up cycle. And it also finalized the most contentious elements of the Paris Agreement rulebook, six years after the landmark deal was done. COP26 aimed to close the gaps: the ambition gap, the finance gap, and the credibility gap. Ambition to keep the 1.5-degree Celsius (1.5°C) target alive, finance to address the needs of developing countries for adaptation and loss and damages resulting from climate change-related events, and credibility to restore trust between countries and with civil society. The negotiations were focused on finalizing the Paris rulebook, which sets the policy signals for how to deliver on the 2015 Paris Agreement, specifically what the international rules should be for trading emissions reductions, known as Article 6. With global voices getting louder, particularly from youth and indigenous peoples' organizations, what comes next will be the work to turn good intentions into actions that drive the economy to a new and resilient state.

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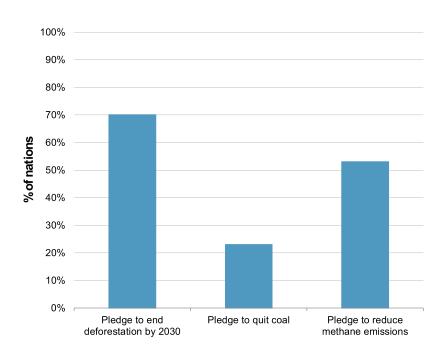
# COP26 Kicks Off With Optimism As Ambition Is Raised

The Glasgow Climate Pact that was ultimately agreed upon calls for a phasing down of coal and "inefficient" fossil fuel subsidies. Both are significant developments since the Paris Agreement did not mention coal nor fossil fuels despite these being the largest causes of human-induced global warming. India proposed a last-minute change from the "phasing out" of coal to "phasing down," based on its view that developing nations should have a larger share of the remaining carbon budget--which all parties eventually agreed on.

The first week of negotiations also saw of a flurry of expected announcements by countries stepping up their ambitions to shift their respective economies toward net zero. Some notable new announcements gave a sense of optimism that global policy goals are aligning, such as from Nigeria and Saudi Arabia, two petrostates reliant on oil exports, committing to net zero by 2060. Many developed countries set a commitment to reach net zero by 2045, with host city Glasgow setting an aggressive target of reaching net zero by 2035. China and the U.S. released a joint statement that included the U.S.'s commitment to reach 100% renewable electricity by 2035 and China to "phase down" coal in the second half of this decade. Both countries will collaborate to reduce methane emissions and develop carbon capture, utilization, and storage, and direct air capture technologies. Direct air capture involves pulling carbon directly from the air for negative emissions. It's still very much in its infancy, with the largest existing facility pulling 4,000 metric tonnes of carbon dioxide (CO2) per year (or 0.00012% of global annual energy-related CO2 emissions) out of the air at a current cost of \$1,200 per tonne. These two technologies have been the subject of much debate because they are seen as delaying the energy transition. Still, for the remaining residual emissions that will need to be netted to achieve Paris, they could be required.

Chart 1

# **Pledges Nations Committed To In Glasgow**



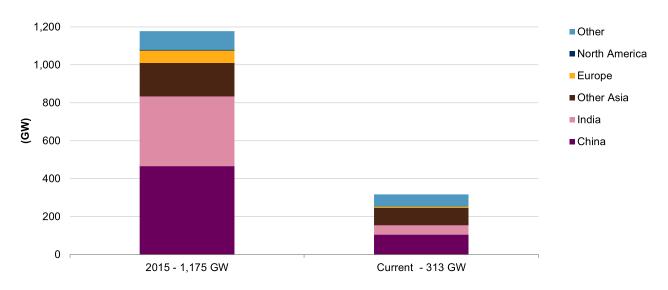
Source: COP26.

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On Nov. 4, multiple countries, many for the first time, signed on to a commitment to address coal-fired power. Among the leading coal-burning countries, India did not take part and Indonesia and the Philippines offered only conditional support. According to S&P Global Platts Analytics, the global pipeline for new coal plants has been collapsing since the Paris Agreement, from 1,175 gigawatts (GW) in 2015 to 313 GW ahead of the latest announcements according to the SPGI Power Plant database. But the S&P Global Platts GIEM Reference Case still shows many countries increasing coal burn from 2019 to 2030, with the greatest increases expected in India by far followed by Vietnam, Indonesia, and the Philippines.

Chart 2

# What A Difference Six Years Makes: Coal-Fired Power Pipeline Dries Up

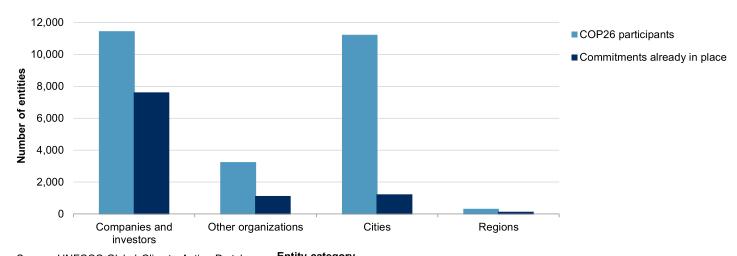


Source: S&P Global Platts Future Energy Outlooks. GW -- Gigawatts. Copyright © 2021 by Standard & Poor's Financial Services LLC. All rights reserved.

Non-state actors, like cities, companies, and financial institutions, have stepped up their ambitions with more than 26,000 entities signed up for the Race to Zero and Race to Resilience campaigns. These campaigns ask that entities have net zero goals, but crucially also interim targets to help track progress and accountability. What's more, the campaign states that offsets cannot be used when viable alternatives exist. Cooperation between sectors is starting to come through, for example Unilever and eight other multinational companies committed to work on zero-carbon shipping by 2040. However, not all parts of the economy are yet represented (such as major private equity firms) and emissions-generating assets could be sold into private markets instead of decommissioned, therefore not contributing to global emissions reduction.

Chart 3

# Over 26,000 Entities Signed Up For Climate Action, With Business Leading On Commitments Actions include commitments to reduce emissions, participating in initiatives, setting plans, and financing



**Entity category** Source: UNFCCC Global Climate Action Portal. Copyright © 2021 by Standard & Poor's Financial Services LLC. All rights reserved.

The Race to Resilience campaign was added following consultation with stakeholders in developing countries, where the focus is more on ensuring their people are protected from the worst effects of climate change--for example, advancing early warning systems for extreme weather events or mainstreaming adaptation into key sectors, such as agriculture--and closing the adaptation gap. The campaign seeks to mobilize non-state actors and strengthen the resilience of four billion people by 2030. All of this increased ambition has been welcomed and gives investors the direction of travel.

Paralleled with all these announcements, financial disclosures related to climate will likely become more robust. As the materiality of climate transition and physical risks escalate, and countries make Task Force on Climate-Related Financial Disclosures (TCFD) disclosures mandatory, we expect the rest of the financial reporting ecosystem to follow. The European Securities Market Authority released a statement that both COVID-19 and climate will be top of its enforcement agenda for the 2021 financial and nonfinancial disclosures, and it will be looking for consistency between climate-related financial and nonfinancial disclosures. A group of investors are also pressuring auditors, since 80% of the audit reports of 107 heavy-emitting company accounts they studied did not show that they assessed climate risk. The group states they intend to use proxy season to vote against the reappointment of auditors perceived as not doing enough to check for climate risk within financial statements.

# The Link Between Finance And Credibility In Negotiations

Climate change disproportionately affects poorer countries and those most vulnerable (the young, old, women, people with disabilities, and indigenous communities), many of whom have also been more severely affected by the COVID-19 pandemic. Between droughts, severe flooding, and

wildfires, extreme event attribution science--the research and modeling that seeks to attribute (or not) extreme weather events to human-caused climate change--shows that most (70% of 405 such events in the past 20 years) have likely been worsened by climate change. The Paris Agreement has two major finance mechanisms to assist: one is a set of transnational funds, for example, the adaptation fund earmarked to make countries more resilient to the physical effects of climate change. The second is a loss and damages mechanism for relief after climate-induced disasters. Many social groups from countries already feeling the worst of climate change are, understandably, heavily focused on this topic.

In the run up to COP26, rich nations failed to deliver on their previous promise of providing \$100 billion per year in climate finance by 2020 to support developing countries building resilience to climate change. The U.N. Environmental Programme's (UNEP) Adaptation Gap Report 2021, released during COP26, compounded this narrative, finding that adaptation costs in developing countries could be five to 10 times greater than current adaptation finance flows, further widening the adaptation gap (see "Plugging The Climate Adaptation Gap With High Resilience Benefit Investments," published Dec. 7, 2018). Despite this, at COP26 a record level of additional public money was committed to the fund this year (\$356 million versus the previous record of \$129 million in 2018), and the U.S. and Qatar also pledged money for the first time. Still, the finance gap played a central role in negotiations, leading to concerns about credibility. Rich nations remain optimistic that the private sector will step in to fill the hole; however, this is not so easy, since the Glasgow Climate Pact stipulates that this finance include "grants and highly concessional forms of finance" aimed at ensuring affordability and social equity. Many of the countries that need it are considered "high risk," with higher capital costs demanded by investors and lenders. We could see some innovative financial solutions to address the affordability barrier to achieving this goal and restoring trust that future commitments will be met.

# Despite Progress On Adaptation, More Is Needed On Measurement And **Tracking**

A key outcome of COP26 is to help protect communities and natural habitats, building resilience to avoid the loss of homes, jobs, and threats to life given the unprecedented climate impacts seen in recent years, elevating adaptation to the same stage as mitigation for developing countries and those most vulnerable. Adaptation finance is central to this effort. The challenge, unlike for mitigation--which has a global metric of greenhouse gas emissions--is that measuring adaptation is multifaceted, context- and location-specific, and we won't always know the outcome of adaptation actions for many years. It's therefore problematic to measure progress on adaptation purely as a function of the number of countries with a national adaptation planning instrument (such as a National Adaptation Plan). Incidentally, 79% of countries have now adopted at least one instrument, up 7% since 2020, with a further 9% of countries planning to develop one, as reported by UNEP, though the efficacy of these plans is arguably more important. With this in mind, a key outcome was a two-year Glasgow-Sharm el-Sheikh work program to support monitoring and tracking adaptation efforts. Countries will need to submit their reports with progress measured against the global goal.

# What Is The Global Goal On Adaptation?

Article 7 of the Paris Agreement established for the first time a "global goal on adaptation" aimed at enhancing adaptive capacity, strengthening resilience, reducing vulnerability (with a view to contributing to sustainable development), and ensuring an adequate adaptation response in the context of the 1.5°C Paris Agreement target.

Despite missing the \$100 billion per year by 2020 climate finance target, countries did agree to double adaptation finance (from 2019)--the equivalent of raising \$40 billion per year by 2025--the first time it will have a quantifiable target. While better, this is significantly less than the current (\$70 billion per year for 2020 to 2030) and future estimates (\$250 billion per year by 2030) of developing countries' adaptation needs, per UNEP.

The Adaptation Fund--a key financier of adaptation projects and programs in developing countries most vulnerable to climate change--also received many record-breaking pledges (totaling over \$356 million, tripling the previous high), including from the U.S. and the EU. Importantly, the pledges will be via grants rather than loans, tempering concerns that developing countries' debt burden would increase under climate change.

## Article 6 Sets Rules For International Carbon Markets

Article 6 refers to the part of the Paris Agreement related to international carbon markets and trade of emissions reductions. The rules for this international market were unresolved until COP26, where a deal has finally been achieved. In a nutshell, COP26 has hung on the political decisions needed to complete the rules. Now that it's completed, we expect international cooperation on emissions reductions to be more efficient and ideally reduce them faster. A supervisory body will oversee the market, which will include elements like those we are familiar with from the sustainable debt markets: descriptions of how the activity links to sustainable development and the achievement of climate goals, validation by third parties, registration of activities, verification and certification, monitoring, and issuance. To trade, issuing entities will need to obtain authorization from the country hosting the project. In addition, there will be a 5% levy taken at issuance that will flow to the adaptation fund for assisting developing countries, as well as cover administrative costs associated with the checks and balances. The rules allow for some carry-over from previous markets, which could increase overall supply and depress carbon prices (see S&P Global Platts' commentary "COP26: Article 6 Talks Grind Forward As Countries Seek Common Ground").

The carbon markets could internalize natural and social capital into our economies. Indigenous peoples are concerned that the popularity of nature-based solutions to "net" residual emissions will result in a land-grab by rich countries and companies to claim benefits associated with forests and force people to migrate. The rules stipulate that human rights be respected and refers to indigenous peoples and local communities. Crucially, there will be a grievance mechanism for stakeholders to raise concerns via an independent process. This could be particularly relevant for companies that are increasingly asked to implement robust human rights due diligence by policymakers with grievance mechanisms (e.g., the EU Mandatory Human Rights Due Diligence Directive expected to come into force in 2023). The value of traded emissions reductions could also be fueled by the co-benefits of these projects, especially on improving biodiversity or the health outcomes of local communities, hence acting as a lever to internalize these positive externalities into our financial systems.

# Efforts Must Be Doubled To Address The Temperature Gap

In August the Intergovernmental Panel on Climate Change (IPCC), a U.N. body that assesses climate change, released a report that assessed five scenarios and reported that human activities are responsible for an increase of 1.1°C compared to 1850-1900 levels. The report notes that global warming of 1.5°C is very likely to occur over the next 20 years. Under a high-emissions scenario, the report finds that the world could warm up to 4.4°C by 2100. Based on this data, in

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September, the U.N. published a synthesis report of climate action plans including information on the latest NDCs available as of July 2021 and requests nations double their climate efforts to prevent global temperatures rising beyond the Paris Agreement's goal. The report stated that available NDCs implied an increase in global greenhouse gas emissions of approximately 16% by 2030 compared to 2010, such increase could lead temperature to rise 2.7°C by the end of the century. In October 2021, the Energy Information Administration released its World Energy Outlook 2021 report stating that if all climate pledges announced before COP26 were met in full and on time, global temperatures would still rise to 1.8°C by 2100. By the time those reports were made, more than 120 countries had announced new targets for emissions reduction by 2030. Still, the report showed that governments fall short in delivering their announced pledges.

Currently, projections are inconsistent and it's uncertain which approach is correct. But actions to reduce emissions and accelerate countries' climate plans need to occur soon. The IPCC set clear benchmarks: to limit temperature to 1.5°C, the world needs to cut emissions 45% below 2010 levels by 2030. In Glasgow, countries committed to increasing their emissions reduction targets and accelerating their decarbonization plans for 2030 by next year, changing the Paris Agreement's original five-year schedule. Some pledges to "keep 1.5 alive" are the Global Methane Pledge, the commitment to end deforestation, and in the power sector the Global Coal to Clean Power Transition statement. We expect these commitments and revised NDCs will improve global warming scenarios. Next year the IPCC will publish the Synthesis Report, where it will report on "near-term responses in changing climate" with a time interval between now and 2030-2040.

# **Industry And Regional Insights**

## Implications for insurers

COP26 could prove a turning point for the insurance industry's role in keeping 1.5°C alive. Facilitating adaptation initiatives and steering capital toward resilience and net zero requires the insurance industry take a more prominent seat at the table and leverage its unique position as risk managers, underwriters, and investors.

The focus on adaptation in Glasgow highlights the opportunity for re/insurers to showcase their longstanding expertise in weather and climate modelling and risk management to help those most at risk from climate change to build resilience. Industry-led initiatives such as the Insurance Development Forum, Global Resilience Index Initiative, and the Global Risk Modelling Alliance will enable insurers to leverage this expertise in working with governments, multilaterals, and local communities to improve their ability to assess, measure, and ultimately reduce their risk from climate change. This opens the door to new insurance products to protect these communities, but also enables better economic resilience that can lead to more insurable assets and new customers.

Better commitments to achieving 1.5°C and the race to zero also present opportunities and challenges for the insurance sector. The non-life industry will undoubtedly play an important role in helping to de-risk the economy's transition to zero carbon as nascent and new technologies such as renewable energy, carbon capture and storage, or more sustainable building materials are needed to achieve the Paris targets. Insurers will need to consider how they can develop products and policies that can protect businesses and investors in these technologies as they develop and grow to economies of scale that make them more competitive than traditional practices.

Insurers own nearly 10% of the world's invested assets, so they will be influential in determining how capital will flow toward sectors, projects, and technologies that will help to achieve 1.5°C.

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Commitments such as the Glasgow Financial Alliance for Net Zero's (GFANZ) \$130 trillion in members' assets, available (at least partly) to help achieve net zero, should steer capital toward greener investments. As many insurers are members of GFANZ, they will play an active role in investing in the transition through those commitments. However, for those insurers not already thinking about exposure to the climate transition in their asset or underwriting portfolios, the mobilization of capital through investment and underwriting following COP26 could accelerate the risk of holding stranded assets or providing coverage to industries at risk from the transition.

Of course, insurers rely on accurate and decision-useful data to inform their investing and underwriting decisions. The lack of standardized, granular, and consistent data about the climate exposure of their underwritten and investee counterparties has hamstrung the industry's efforts to steer capital and behavior toward net zero. Efforts to standardize reporting on climate risks undertaken by the TCFD and the International Sustainability Standards Board announced during COP26 will help make the reporting and disclosure of the firms insurers are underwriting and investing in consistent. Additionally, innovation in technology and data analytics will be important for the industry to analyze and measure risks and develop new products to aid in de-risking the transition.

### **Latin America**

Latin America's economy depends on carbon-intensive and extractive industries such as agriculture, mining, and oil and gas. We have observed that absent a long period of political, social and economic stability, the region maintains high transition risks and is prone to physical risks. To this end, Brazil, Mexico, Argentina, followed by Venezuela, Chile, and Colombia are the top greenhouse gas emitters in the region. Notably, the biggest polluters signed a declaration to stop deforestation in 2030 that, supported by adequate climate finance, could reduce around 3.5 gigatonnes of CO2 per year. The commitment is especially relevant because the region accounts for 25% of the world's natural reserves and 30% of water resources, according to IPCC. Similarly, parties signed a pledge to reduce global methane emissions at least 30% from 2020 levels by 2030. At Glasgow, 76% of the nations located in the region committed to end deforestation, 64% signed the pledge to reduce methane emissions, and 2% committed to quit coal.

Brazil specifically will face increasing pressure to execute plans to end deforestation as soon as possible. The country's emissions keep rising as deforestation rates have peaked in recent years. Agriculture, land use, and forestry account for 62% of total greenhouse gas emissions (per CAIT 2018). Positively, the country committed to end deforestation by 2030. Last year Brazil failed to increase its NDC's ambitions, the CO2 baseline was revised upwards, and the pledge remained the same level as the initial submission. It also does not mention adaptation plans in its updated NDC. On the positive side, it announced a commitment to reach net zero by 2050 instead of 2060. Although its energy matrix is one of the cleanest in the region, Brazil is still exposed to investments in fossil fuels and emissions generated by deforestation.

In its updated NDC, Mexico kept the same target but higher baseline, leading to higher overall emissions in 2030. Currently it's investing in a refinery and focused on boosting oil production and limiting renewable energy generation from the private sector. Argentina signed a 2% improvement on its mitigation target, as well as a deal for US\$8 billion investment in a green hydrogen plant located in Rio Negro, Patagonia. Chile meanwhile committed to the Global Coal To Clean Power Transition to phase out coal-fired power generation and not build or invest in new coal power by 2040s. Chile and Ecuador were the only countries in the region to support this statement. In Glasgow, Chile also announced it will increase its battery-based energy storage capacity to 1.5 GW hours a day by 2023.

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At Glasgow, Colombia presented its long-term strategy, E2050, to achieve carbon neutrality by 2050 and reduce CO2 emissions 51% by 2030. It also announced a commitment to protect 30% of its land and ocean by 2022, an ambitious goal compared to the global target of 2030. Along with Ecuador, Panama, and Costa Rica, it agreed to join marine reserves to form one interconnected area covering more than 500,000 sq. km, called the Eastern Tropical Pacific Marine Corridor. The country has a high percentage of renewable resources in its energy matrix but remains exposed to deforestation and investments in exploration and production in the oil and gas sector.

Although there were not clear pledges to finance developing countries, in the Glasgow agreement, developed countries pledged to at least double the amount given to adaptation by 2025.

### Asia-Pacific

The wide range of economic, social, and political operating environments in Asia-Pacific makes agreeing on how to tackle climate change extraordinarily complex. China's commitment to boost climate cooperation with the U.S. is symbolically important, although pressure with India to dilute targets, such as language on coal-fired power plants and subsidies, tempers outcomes. The continual expansion of commitments, including methane emissions, reflects the steady steps China is making to address its own value chain. Further, the reaffirmation of funding to developing countries reiterates its ability to influence other nations to transition and adapt. The U.K. has committed £290 million in funding for Asia-Pacific for programs such as Climate Action for a Resilient Asia and the Global Adaptation Fund.

In our view, India is lagging China's public positioning in combatting climate change. India is undertaking a structural shift in its renewable energy mix like many other countries; however, the pledge to net zero by 2070 is later than other big emitters but is not surprising given economic development is also well behind peers. In our view, the private sector, driven by a few industrialists and foreign investors, has already initiated significant investments in renewable energy projects. Complexities will undoubtedly arise between now and 2070, including how state-owned power companies will meet timely payments on existing coal-fired power agreements.

Japan's efforts to incorporate sustainability considerations in its capital markets requirements support the reaffirmation of its 2050 carbon neutral pledge, and its efforts for a 46% reduction in greenhouse gas emissions by 2030. Unlocking an additional US\$10 billion on top of existing US\$60 billion in pledges reflects the country's importance as a source of much-needed capital to support the transition of public and private enterprises across the region. Australia's government meanwhile supports a "technology, not taxes" approach to addressing its climate change commitments. Reports on the federal government's lack of willingness to tighten its 2030 targets reflects, in our view, the political environment but not the significant efforts of the states, private enterprise and household investment in renewable energy. Over 30% of Australian households have solar panels, with some estimates that nearly half of households will be fitted by 2030.

COP26 agreements to end deforestation by 2030 have a clear impact on Indonesia. But difficulty balancing environmental and economic considerations are not unique. The question is how much progress it can make to address deforestation, both legal and illegal, that will satisfy international investors and companies with exposed supply chains. We expect investment decisions will immediately incorporate this deforestation pledge and likely limit access to funding for companies not taking sufficient steps to address concerns.

# Attention Now Turns To Action In 2022 And Beyond

Calling COP26 a success depends on your perspective, and these international agreements usually mean many come away dissatisfied. We have seen some real optimism from the ambitious commitments made and resolution of outstanding rules for trading emissions reductions. However, the road ahead will require detailed and focused work to turn all of this good intention into tangible results ahead of the first global stocktake, which will take place now until 2023 (as laid out in Article 15 of the 2015 agreement), and will be repeated every five years. The aim will be to assess progress and long-term goals. Governments have sent a signal to the private sector that support is needed to transfer finance, technical know-how, and technologies to those that need it.

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### Related Research

- On One End, Trillions Of Dollars To Invest In Climate. On The Other, Huge And Urgent Need. How Do We Connect The Dots?, Nov. 12, 2021
- Natural Capital Valuation An Incentive To Protect Nature?, Nov. 8, 2021
- Global Reinsurers Grapple With Climate Change Risks, Sept. 23, 2021
- Too Late For Net Zero Emissions By 2050? The Potential Of Forests And Soils, June 4, 2020
- COP25: There's Still Life In The Sputtering Climate Change Talks, Dec. 18, 2019
- Raising Ambitions: COP24 Tilts Toward Achieving 1.5 Degrees Climate Target, Dec. 19, 2018

### External Research

- UNFCCC Climate Action Portal
- Adaptation Gap Report 2021: The Gathering Storm Adapting To Climate Change In A Post-Pandemic World, United Nations Environment Programme, Nov. 4, 2021
- IEA, World Energy Outlook 2021, IEA, October 2021
- Independent Assessment of UK Climate Risk, Climate Change Committee, June 16, 2021
- Climate Watch (CAIT): Country Greenhouse Gas Emissions Data
- AR6 Climate Change 2021: The Physical Science Basis

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