

McKinsey Explainers

What is COP?

COP refers to the United Nations' annual conference on climate change. Its 28th meeting (COP28) is scheduled to begin November 30, 2023, in Dubai, United Arab Emirates.



COP—which stands for [Conference of the Parties](#)—is an annual meeting where United Nations member states convene to assess progress in dealing with climate change and make a plan for climate action within the guidelines of the UNFCCC. (The formal name for the meetings is the Conference of the Parties of the UN Framework Convention on Climate Change or the United Nations Climate Change Conference.) The first COP was held in Berlin in 1995. [Last year's COP27](#) was held in Sharm El Sheikh, Egypt.

COP decisions can have global authority: in the UN system, powerful countries like the United States and Russia have the same voting rights as tiny island nations like Vanuatu or São Tomé and Príncipe. Plus, decisions can be made only by consensus. UN member states send representatives to participate in the negotiations. Observer organizations also send delegates, and industry representatives and lobbyists attend as well.

But before we dive into COP, its triumphs and challenges, and what to look for this year, let's review some basics.

Learn more about McKinsey's [presence at COP](#).

What are greenhouse gases?

Greenhouse gases are naturally occurring gases, such as CO₂, methane, and sulfur dioxide, that trap heat on Earth—like a greenhouse traps heat to grow tomatoes in cold climates. According to NASA, without greenhouse gases, the average temperature on Earth would be [0°F](#) (–18°C), rather than the [balmy 59°F](#) (15°C) it is now.

Around the mid-1700s, with the beginning of the Industrial Revolution, humans started burning fossil

fuels to support increasingly mechanized lifestyles. Burning fossil fuels releases greenhouse gases into the atmosphere. And they're not going anywhere soon: CO₂, which is the cause for about three-quarters of global warming, can take [thousands of years](#) to be fully absorbed. More greenhouse gases in the atmosphere means a warmer planet.

What is a 1.5°C pathway?

Since the Industrial Revolution, the average global surface temperature has risen by about 1.2°C. Most scientists agree that an increase of 1.5°C is the threshold beyond which the effects of climate change would be the most dangerous and irreversible. A 1.5°C pathway is a plan to keep the average global temperature increase below that level. At COP26, in 2021, governments agreed to focus on a 1.5°C pathway rather than the less stringent 2°C pathway goal agreed on in Paris in 2015. To limit global warming to 1.5°C, every part of the global economy would need to [rapidly decarbonize](#). Many companies, countries, and organizations have pledged to decarbonize, or make the net-zero transition, in the coming years.

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What is net zero?

A net-zero gain of greenhouse gases in the atmosphere would be achieved when annual greenhouse gas emissions are equal to the amount removed each year. The pathways to net zero, identified by the Intergovernmental Panel on Climate Change, involve both decarbonization and carbon removal.

Decarbonization is the reduction of carbon and other greenhouse gases in the atmosphere,

achieved by reducing the use of high-carbon-emitting fossil fuels. Carbon removal solutions remove carbon from the atmosphere and store it over the long term.

To achieve net zero, decarbonization would need to happen across all sectors, including energy, agriculture, and land use. And carbon removal would be needed to offset residual, hard-to-abate emissions from industries such as cement.

What are the Kyoto Protocol and the Paris Agreement?

The Kyoto Protocol, ratified in 1997, is a [landmark international treaty](#) in which signatories agreed to reduce greenhouse gas emissions to prevent human interference with the natural climate. The treaty, a result of COP3, is one of the most significant results of the COP meetings. In 2012, the agreement was extended to 2020.

The Paris Agreement, also known as the Paris Climate Accords, is an international treaty negotiated in 2015 at COP21. In Paris, participants agreed to limit the increase of global temperatures to 2°C while pursuing efforts to stay within 1.5°C. According to the agreement, each country must track, record, and report their carbon emissions as well as their efforts to reduce and offset them.

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What happened at the last COP?

McKinsey delegates in attendance at COP27, in Sharm El Sheikh, reported on the [significant roadblocks](#) that remain on the path to net zero. Specifically, they say, a 1.5°C pathway is not yet achievable. To reduce emissions to the extent

required, leaders and their organizations will need to take additional, urgent action toward emissions reductions and removals.

Delegates at COP27 also noted that the conference's emphasis widened beyond past discussions aimed at mitigating climate catastrophe. Adaptation and loss and damage were major themes, particularly intended to increase resilience for the billions of people living in geographies that are more vulnerable to climate hazards. Net-zero emissions remain a goal, but [energy security](#), resilience, and affordability are equally important.

What do business leaders need to know about COP27?

Based on conversations with executives, government leaders, and official delegates at COP27, McKinsey attendees saw ten key takeaways to accelerate the net-zero transition and achieve energy sustainability:

1. The *private sector* has a key role to play in accelerating decarbonization, particularly with [cross-business collaboration](#).
2. Leaders should maintain focus on the long term while adjusting to the realities of the present, *squaring resilience with net-zero commitments*.
3. Private and public sectors should *go on the offense*, making bets on green energy and deploying capital at scale.
4. Significant investment in promising *new green technologies* is needed, from carbon capture to sustainable agriculture.

5. Leaders should prepare for the biggest *capital reallocation* of our lifetimes. McKinsey estimates that capital spending on assets for the net-zero transition will need to increase by \$3.5 trillion annually through 2050.
6. *Nature-based solutions*, like reforestation and improving biodiversity, can help address the converging crises of climate change and nature loss.
7. Leaders should *collaborate across ecosystems*, involving private, public, and philanthropic communities in sustainability efforts.
8. Leaders should facilitate a *just transition* for lower-income countries, which are, on average, more likely to be exposed to certain climate hazards.
9. *Africa will play a pivotal role* in the energy transition. An orderly energy transition in Africa could unleash crucial economic growth in the region.
10. Business and government leaders should transition from commitment to *action for COP28*. We anticipate more commitments from corporates, countries, and coalitions.

a marked increase from the fewer than 4,000 who attended the last edition in 2018—adopted [a landmark agreement](#) to protect [natural capital](#) and limit biodiversity loss around the world. The Kunming-Montreal Global Biodiversity Framework provides the [following targets](#), among others:

- protecting at least 30 percent of terrestrial, inland water and coastal and marine areas
- ensuring that at least 30 percent of degraded areas are under effective restoration
- mobilizing \$200 billion per year by 2030 invest in biodiversity

Moving forward, the UN Biodiversity Conference will meet every two years.

Learn more about McKinsey's [Natural Capital and Nature service line](#).

What to expect at COP28?

COP28 is being hosted by the United Arab Emirates in Dubai. This year's event will feature the first "global stocktake," which will provide a comprehensive assessment of progress since the Paris Agreement. The objective is to align efforts on climate action, including measures to bridge the gaps in progress.

COP28 will also spotlight climate adaptation initiatives, as well as mitigation. These will fall under four key themes: health, water, food, and nature. And finally, COP28 will be the first to feature expanded stakeholder involvement, including high-emissions sectors and private sector oil and gas organizations.

Didn't COP15 also happen recently? What happened there?

There's another COP you might have heard about: the Conference of the Parties to the Convention on Biological Diversity, also referred to as COP. The first UN Biodiversity Conference (COP1) was held in 1994 in the Bahamas. The most recent biodiversity conference, COP15, was the largest ever. It was chaired by China and met in Montreal, Canada, in 2022. Nearly 20,000 leaders and representatives—

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What role does McKinsey play at COP28?

Each year, McKinsey convenes global leaders alongside COP. At COP28, McKinsey will host a series of in-person and virtual events featuring business, government, and nongovernmental organization leaders. Discussions will focus on how to implement ambitious climate commitments while leading a wave of innovation and economic growth that safeguards our planet and advances sustainability.

McKinsey's role as a convener during COP28 continues [the firm's commitment to accelerate sustainable, inclusive growth](#). In the months leading up to COP28, we will publish articles and host webinars on COP themes, work with our clients to implement net-zero plans and create climate tools and solutions, and convene a vibrant ecosystem of institutions to tackle some of the biggest problems facing our world today.

Articles referenced:

- [“At COP15, new urgency on what governments and companies can do to restore natural capital,”](#) January 31, 2023, [Caroline De Vit](#), [Tony Hansen](#), [Duko Hopman](#), [Joshua Katz](#), and [Hamid Samandari](#)

- [“Reflections from COP27,”](#) December 15, 2022, [Kassia Yanosek](#)
- [“Nature in the balance: What companies can do to restore natural capital,”](#) December 5, 2022, [Daniel Aminetzah](#), [Julien Claes](#), [Caroline De Vit](#), [Ivo Erben](#), [Duko Hopman](#), [Kartik Jayaram](#), [Joshua Katz](#), [Tomas Nauc ler](#), [Hamid Samandari](#), [Tucker Van Aken](#), and [Dee Yang](#)
- [“Reflections from COP27: Ten takeaways for CEOs,”](#) November 21, 2022, [Daniel Pachtod](#), [Tarek El Sayed](#), and [Amina Kandil](#)

Sign up here for updates from McKinsey's Sustainability Practice and to receive an invitation to register for McKinsey's virtual events during COP28. And check out [sustainability-related job opportunities](#) if you're interested in working at McKinsey.

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