

# Climate change 2021: There's no turning back now

November 30 2021, by Marlowe Hood

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Fossil fuels are the main driver of global warming.

Across a quarter century of UN climate conferences tasked with saving humanity from itself, one was deemed a chaotic failure (Copenhagen/2009), another a stunning success (Paris/2015), and the

rest landed somewhere in between.

This year's COP26 inspired all these reactions at once.

Swedish activist Greta Thunberg, leading a 100,000-strong march through the streets of Glasgow, dismissed the two-week meet as a "greenwashing festival".

But dedicated experts in the negotiating arena hailed solid—even historic—advances in beating back the existential threat of global warming.

More often than not, observers vacillated between approval and criticism, hope and despair.

"The Glasgow Climate Pact is more than we expected, but less than we hoped for," Dann Mitchell, head of climate hazards at Britain's Met Office, said with Haiku-like economy.

Gauging the efficacy of measures announced at the COP26 summit largely depends on the yardstick used to measure them.

Compared to what came before, the first-ever call by 196 countries to draw down coal-fired power, or a promise to double financial aid each year—to roughly \$40 billion—so poor nations can brace for [climate impacts](#), are giant steps forward.

Likewise a provision obliging countries to consider setting more ambitious targets for reducing [carbon pollution](#) every year rather than once every five years.

But all these hard-won gains at COP26 shrivel in significance when stacked up against hard science.



in the 11th hour, China and the US sealed the deal at COP26.

## **Glasgow exit lane**

An unbroken cascade in 2021 of deadly floods, heatwaves and wildfires across four continents, combined with ever more detailed projections, left no doubt that going beyond the 1.5 degrees Celsius (2.6 degrees Fahrenheit) heating limit envisioned in the Paris Agreement would push Earth into the red zone.

"As a lifelong optimist, I see the Glasgow outcome as half-full rather than half-empty," said Alden Meyer, a senior analyst at climate and



energy think tank E3G.

"But the atmosphere responds to emissions—not COP decisions—and much work remains ahead to translate the strong rhetoric here into reality."

2021 also saw Part 1 of the UN Intergovernmental Panel on Climate Change's (IPCC) first comprehensive synthesis of climate science in seven years.

It found that global heating is virtually certain to pass 1.5C, probably within a decade. Meanwhile, [ocean levels](#) are rising faster than anticipated, and will do so for centuries.



2021 saw a cascade of climate-enhanced fires, floods and heatwaves across four continents.

And forests, soil and oceans—which absorb more than half of humanity's carbon pollution—show signs of saturation.

Then there is the threat of "tipping points" that could see permafrost release massive amounts of CO<sub>2</sub> and methane, the Amazon basin transformed into savannah, and ice sheets shedding enough mass to submerge cities and deltas home to hundreds of millions.

"Make no mistake, we are still on the road to hell," said Dave Reay, head of the University of Edinburgh's Climate Change Institute.

"But Glasgow has at least created an exit lane."

## **Permanent breaking story**

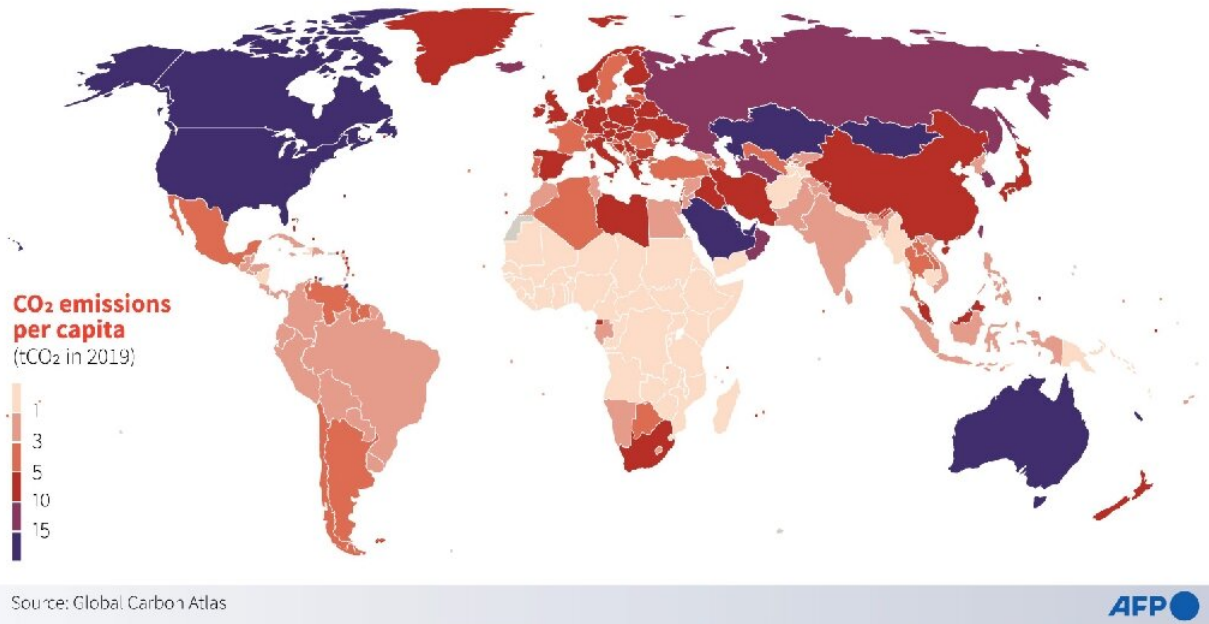
Part 2 of the IPCC report on climate impacts, seen exclusively by AFP ahead of its February 2022 publication, reveals another yawning gap between the baby steps of COP26 and what is needed in the long term.

Helping vulnerable nations cope, to the multiplier effect of global heating on extreme weather could soon require trillions of dollars per year, not the tens of billions put on the table at COP26, a draft version of the report makes clear.

GLOBAL CO<sub>2</sub> EMISSIONS PER CAPITA

COP26

Current plans to reduce emissions would lead to a world at **2.7°C degrees by 2100** according to the UN, far beyond the 1.5 - 2°C objective under the Paris Agreement



China's per capita greenhouse gas emissions now exceed Europe's.

"Adaptation costs are significantly higher than previously estimated, resulting in a growing 'adaptation finance gap'," said an executive summary of the 4,000-page report.

The failure of rich nations to deliver \$100 billion a year by 2020 to help developing countries makes it hard to imagine where these trillions will come from.

Glasgow marked the transition from fleshing out the rules for the 2015 Paris treaty to implementing its provisions.

But unlike the aftermath of other major COPs, the climate crisis will

remain front-and-centre, and this permanent breaking story is not going to recede into the background anytime soon.

How that saga unfolds will depend a lot on the world's four major emitters, collectively responsible for 60 percent of global carbon pollution.

The United States and the European Union have pledged carbon neutrality by 2050 and recently set more ambitious emissions reduction targets for 2030, but refused to set up a fund demanded by more than 130 developing countries to help pay for climate damage already incurred.



Climate Justice activist Vanessa Nakate speaks during a plenary session at the COP26 UN Climate Change Conference.

## All sectors, all countries

China and India—accounting for 38 percent of global emissions in 2021, and rising—have resisted pressure to foreswear fossil fuels.

Beijing has steadfastly refused to do what scientists say is doable and necessary to stay under 2C: peak their emissions far earlier than 2030.

If climate politics remain stymied, however, global capital is already flowing into what some have called the most massive economic transformation in human history.

In Glasgow, former Bank of England governor Mark Carney boasted that nearly 500 banks, insurers and asset managers worth \$130 trillion were ready to finance climate action.

"If we only had to transform one sector, or move one country off [fossil fuels](#), we would have done so long ago," commented Christiana Figueres, who headed the UN climate convention when the Paris deal was struck.



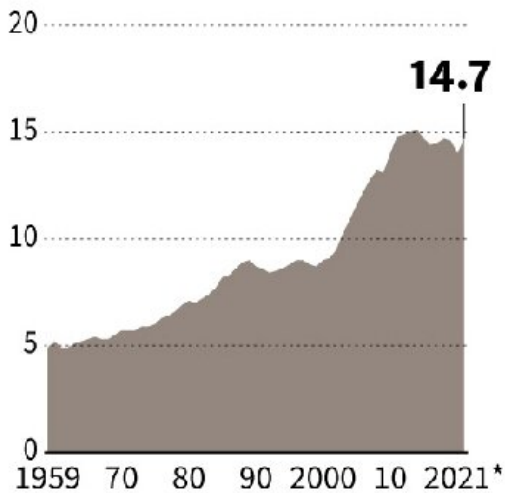
# GLOBAL EMISSIONS

COP26

By type of fossil energy

Gigatonnes CO<sub>2</sub>/year

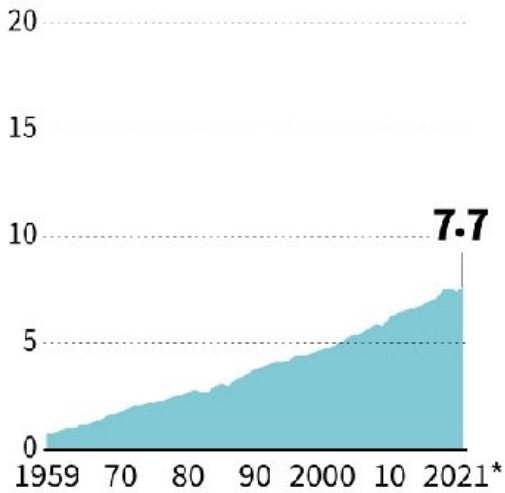
## COAL



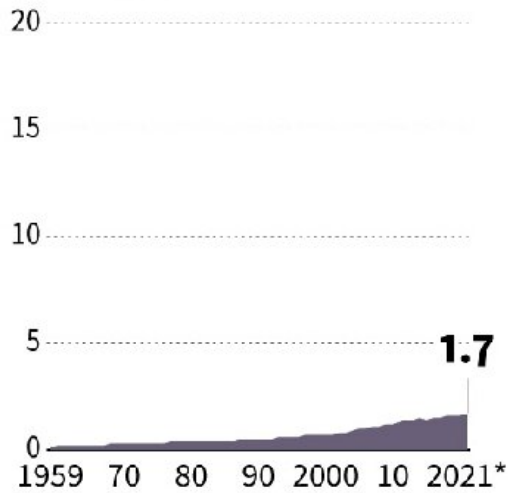
## OIL



## GAS



## CEMENT



Source: Global Carbon Project 2021

\*Projections



Annual carbon emissions worldwide by type of fossil energy since 1959.



Human rights activists hold placards in Lahore on November 8 during a protest in connection with the COP26 UN Climate Change Conference.





A flash flood caused by Tropical Storm Henri makes landfall, in Helmetta, New Jersey in August 2021.

"But all sectors of the global economy have to be decarbonised, and all countries must switch to clean technologies."

Where some of that money might flow—and who might get left out—has also come into focus, with major investment deals announced for South Africa, and others in the pipeline for emerging economies such as Indonesia and Vietnam.

But there is little incentive for private capital to help the poorest and most climate vulnerable countries to cope with climate ravages and shore up their defences.

"We cannot just wait for open market incentives to have their way, we need to set prices on carbon globally, we need to set science-based targets that become [climate](#) laws," said Johan Rockstrom, director of the Potsdam Institute for Climate Impact Research.

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