

Rich nations need to ditch fossil fuels by 2040: scientists

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Rich countries need to stop using coal by 2030 and oil and gas by 2040, with poorer nations following a decade behind, to give the world a chance of limiting warming to 1.5C, climate scientists told the UN

Friday.

In a note to the UN Secretary-General Antonio Guterres and UN Climate Change body, shared with AFP, [climate scientists](#) from the Potsdam Institute for Climate Impact Research (PIK) and Exeter University said there was very little room for anything but a total phase-out of fossil fuels.

The steep timeline they laid out comes as climate negotiators at the COP28 talks in Dubai are tussling over the future of oil, gas and coal, responsible for the lion's share of humanity's planet-heating emissions.

The UN climate negotiations are tasked with helping the world meet the Paris deal goal of limiting global warming to 1.5 degrees Celsius from pre-industrial levels, but have often been vague on how that target will be achieved.

PIK director Johan Rockstrom said that the new calculations sent to the UN show the world unwinding [fossil fuel use](#) at a speed and scale that makes debates at COP28 about decarbonizing by 2050 or a gradual "phasedown" plan beside the point.

"The discussions should be around serious and fair efforts to start implementing a phase out plan," he said.

The note to Guterres uses estimates of the amount of carbon dioxide that the world can pump into the atmosphere and still limit warming to 1.5C from the UN's IPCC [climate](#) panel.

The scientists calculate the implications for oil and gas, if wealthy Organization for Economic Cooperation and Development (OECD) countries can phase out coal by 2030, followed by the rest of the world in 2040.

They found rich nations would need to stop using oil and gas by 2040, which would give other countries until 2050.

But even that challenging timeline could be too optimistic, the scientists said.

Using more recent studies suggesting a much-reduced carbon budget implied a phasing out of all fossil fuels in rich countries as early as 2030—and everywhere else by 2040.

Emissions cut 'ASAP'

Negotiators at COP28 are sparring over language on fossil fuels in a draft deal that would be a landmark achievement—if it survives to a final text.

The draft has a 2030 target for the "rapid phase out of unabated coal power"—meaning without technology to capture emissions.

It recognizes the IPCC has suggested a 75 percent reduction in use from 2019 levels by 2030.

On [fossil fuels](#) in general, there are several options including a phase-out "in line with best available science".

The International Energy Agency's recent net zero report called on wealthy countries to bring forward their decarbonization plans to 2045, with China hitting the target in 2050, giving developing countries longer to slash emissions.

Rockstrom and co-author Pierre Friedlingstein of Exeter University said what their note and the IPCC and IEA scenarios shows is that global emissions need to decline by around seven percent a year, with an

ultimate goal of halving them by 2030.

"The global curve of emissions needs to bend ASAP," they said in a statement.

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