

Climate science report 'critical for success' of COP26: UN

July 26 2021, by Marlowe Hood



Scientists have said greenhouse gas emissions must decline 50 percent by 2030, and be phased out entirely by 2050 to stay within range of 1.5C.

Nearly 200 nations started online negotiations Monday to validate a UN science report that will anchor autumn summits charged with preventing climate catastrophe on a planetary scale.

"The report that you are going to finalise is going to be very important worldwide," World Meteorological Organization head Petteri Taalas told some 700 delegates by Zoom.

The Intergovernmental Panel on Climate Change (IPCC) assessment "is critical for the success of the Glasgow climate conference in November," he said.

Record-smashing heatwaves, floods and drought across three continents in recent weeks—all amplified by global warming—have added pressure for decisive action.

"For years we have warned that all of this was possible, that all of this was coming," the UN's climate chief, Patricia Espinosa, said in a prepared statement.

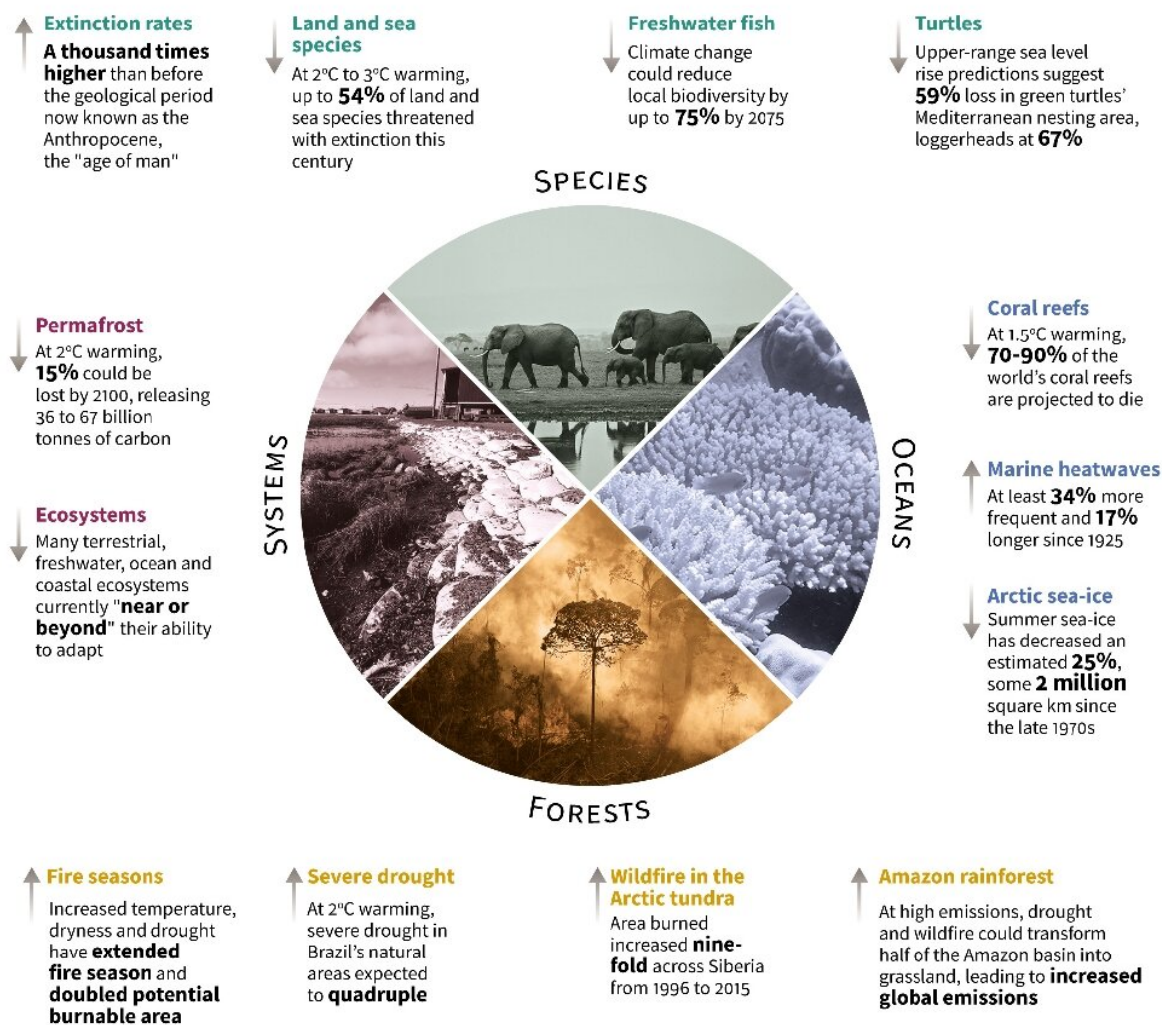
A key G20 summit with climate on the agenda is slated for late October.

Separately on Monday, the first face-to-face climate talks among governments in over 18 months showed real engagement and possible areas of compromise, officials said.

However, the two-day ministerial meeting in London also laid bare differences, especially over the future of coal, that must be bridged before the COP26 summit in Glasgow.

Britain's COP26 president, Alok Sharma, said the climate and environment ministers from more than 50 countries saw first-hand the changes afoot with torrential rain and flash floods hitting London as they met.

Climate change: the impact on nature



Source: IPCC draft report, main points published by AFP in June 2021 / AFP Photos/ AFP Photos/ Greg Torda/ARC Centre of Excellence for Coral Reef Studies

AFP

Highlights of a landmark Intergovernmental Panel on Climate Change (IPCC) draft report on the effects of a warming planet on nature.

Evaporating doubts

The world is a different place since the IPCC's last comprehensive

overview in 2014 of global heating, past and future.

Lingering doubts that warming was gathering pace or almost entirely human in origin, along with the falsely reassuring notion that climate impacts are tomorrow's problem, have since evaporated in the haze of deadly heatwaves and fires.

Another milestone since the last IPCC tome: the Paris Agreement has been adopted, with a collective promise to cap the planet's rising surface temperature at "well below" two degrees Celsius (3.6 degrees Fahrenheit) above late-19th century levels.

Carbon pollution from burning fossil fuels, methane leaks and agriculture has driven up the thermometer 1.1 degrees Celsius so far.

The 2015 treaty also features an aspirational limit on warming of 1.5 degrees Celsius, with many parties no doubt assuming this goal could be safely ignored.

But an IPCC special report in 2018 showed how much more devastating an extra 2 degrees Celsius would be, for humanity and the planet.



Attribution science allow scientists to rapidly quantify the extent to which climate change has boosted an extreme weather event's intensity or likelihood.

Low-balling the danger

"1.5 Celsius became the de facto target"—and proof of the IPCC's influence in shaping global policy, IPCC lead author and Maynooth University professor Peter Thorne told AFP.

Scientists have calculated that greenhouse gas emissions must decline 50 percent by 2030, and be phased out entirely by 2050 to stay within range of 1.5 degrees Celsius.

"The reality is that we are not on track to achieve the Paris Agreement

goals of limiting climate change to 1.5 degrees by the end of the century," said Espinosa.

On current trends, she noted, the world will warm more than twice that much.

A third sea change over the last seven years is in the science itself.

"Today we have better climate projection models, and longer observations with a much clearer signal of climate change," climatologist Robert Vautard, also an IPCC lead author and director of France's Pierre-Simon Laplace Institute, told AFP.

Within days of the deadly "heat dome" that scorched Canada and the western US last month, the World Weather Attribution consortium calculated that the heatwave would have been virtually impossible without manmade warming.



IPPC chairman Hoesung Lee (R) and co-chairs attend a press conference on a special IPCC report on climate change and land on August 8, 2019 in Geneva.

'Transformational change'

From Monday, representatives from 195 nations, with lead scientists at their elbow, will vet a 20 to 30-page "summary for policymakers" line by line, word by word.

The virtual meeting for this first instalment—covering physical science—of the three-part report will take two weeks rather than the usual one, with the document's release slated for August 9.

Part two of the report, to be published in February 2022, covers impacts.

A leaked draft obtained by AFP warns that climate change will fundamentally reshape life on Earth in the coming decades even if planet-warming carbon pollution is tamed, and calls for "transformational change" lest future generations face far worse.

Part three, to be unveiled the following month, examines solutions for reducing emissions.

Based almost entirely on published research, the report under review this week will likely forecast—even under optimistic scenarios—a temporary "overshoot" of the 1.5 degrees Celsius target.

There will also be a new focus on so-called "low-probability, high-risk" events, such as the irreversible melting of ice sheets that could lift sea levels by metres, and the decay of permafrost laded with greenhouse gases.

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Citation: Climate science report 'critical for success' of COP26: UN (2021, July 26) retrieved 17 May 2024 from <https://phys.org/news/2021-07-climate-science-critical-success-cop26.html>

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