

UN agency report documents worldwide impact of climate change

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The latest report issued by the Intergovernmental Panel on Climate Change (IPCC) Monday morning goes beyond all previous global scientific documents to definitively link human industrial and agricultural activity to climate change, and to link climate change to specific weather events like recent droughts, heat waves, storms and flooding.

Some 234 scientists summarized the results of more than 14,000 separate studies, but the language of the report is stripped of the usual bureaucratism that afflicts agencies of the United Nations, mainly to conceal conflicting class and national interests. In part, that is because this report is confined to the physical evidence of climate change and avoids any discussion of the social consequences or policy proposals—both are set for reports to be issued next year.

Nonetheless, the language is much stronger than previous IPCC studies. The summary for policy makers declares, “It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred.”

They go on to warn, “Human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years,” adding, “Observed warming is driven by emissions from human activities...”

“Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened,” the report continues.

The report notes that from 1850 to the present, human activity has raised the average temperature of the globe by 1.1 degrees Celsius, mainly through the burning of fossil fuels like coal, gas and oil.

A further increase of 0.4 degrees, bringing the total rise to 1.5 degrees Celsius, will take place over the next

decade, regardless of what policy measures are adopted. It is the inevitable consequence of emissions of carbon dioxide that have already taken place, as well as other processes that are now in the past.

The report is strongest when it applies new developments in data modeling, satellite measurement and attribution science (establishing causal links) to give regional and even local accounts of the impact of climate change. For example, the United States was divided into Western, Central and Eastern portions, each considered separately and as parts of the global whole.

Unlike the last such report, issued in 2013, this IPCC document directly links climate change to such events as the recent flooding in Germany and Belgium, the heat dome over the Pacific Northwest, droughts and wildfires in the western US and the eastern Mediterranean, and the increasing frequency and intensity of hurricanes and cyclones.

The alarm being raised by the scientists is thus not merely general, but concrete and specific. If there is not a concerted, systematic and global response to the dangers, there will be more frequent and ever larger such disasters.

In part, the prospect of greater weather extremes at both ends of the spectrum—drought and storms—relates to a simple physical relationship. The higher the temperature of the air, the more water vapor it can accommodate and store. Rainfall can be heavier, but also, droughts can be longer and more severe since water is diverted elsewhere.

An atmosphere 1.1 degrees hotter than in the preindustrial era already produces disastrous changes in rainfall, heat waves and snowstorms. The 1.5-degree rise that is inevitable will have further consequences. A rise by 2 degrees, let alone 3 or 4, would mean

catastrophes on the order of the German and Chinese floods taking place every week or every day.

Added to this is the disproportionate impact of global warming on the polar regions, the Arctic and Antarctic, and especially the huge glacial formations there, which, once melted, cannot be easily reconstituted under conditions of a warming planet.

The objective data is absolutely irrefutable: carbon dioxide in the atmosphere reached a seasonal high of 419 parts per million this year, the highest in two million years, based on the fossil record.

Many of the consequences of global warming are already irreversible, at least on a scale of decades. Increased ocean temperature and acidity have already killed off massive swaths of the world's coral reefs, while sea levels have steadily risen one inch every decade for more than a century.

Catastrophes on a truly global scale, such as the disintegration of the Greenland or Antarctic ice caps, or the breakup of the Gulf Stream, are on the horizon if there is not significant change in the trajectory of climatic processes.

The new report sets the framework for an upcoming conference of 197 nations in Glasgow, Scotland in November, the next stage in an endless, and fruitless, process that included the Paris accords in 2015, in which the same countries pledged to take voluntary action to limit the rise in world temperatures to 1.5 degrees Celsius above the preindustrial level.

The conference led to no concrete improvement and was followed by the US withdrawal from the accord under the Trump administration, headed by a scientific ignoramus and mouthpiece for the fossil fuel industries who called claims of global warming a Chinese plot.

The replacement of Trump by Biden allows the reestablishment of a superficial global consensus, which will duly be ratified at Glasgow through some diplomatic patchwork. But no assembly of capitalist nation-states is capable of actually dealing with the existential threat of climate change, whatever the rhetoric of Biden and his climate envoy, John Kerry, the former senator and secretary of state (and apologist for American imperialist violence and aggression).

Climate change is a global threat, but it is inextricably bound up with the development of the capitalist system. It is not industrial development itself—as the IPCC report implies—that is the cause of the climate crisis, but

the development of the productive forces under the aegis of the capitalist ruling class, on the basis of private profit and the nation-state system, that has given rise to the disaster now facing humanity.

Dealing effectively and rationally with climate change can no more be left to the world's financial aristocracy than dealing with a global pandemic. Both require the mobilization of the only social class that will defend all that is progressive in modern science and technology, while abolishing the irrational, exploitative and monstrously self-destructive social relations of the profit system. That means the international working class, under the leadership of the world party of socialist revolution.



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