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# Area of Amazon affected by wildfires predicted to grow by 2050

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By [Loyal Liverpool](#)



**Amazon deforestation officially hit its highest level in a decade in November**

Gustavo Basso/NurPhoto via Getty Images

Amazon wildfires are predicted to worsen, doubling the amount of an important region of forest affected by 2050. The result could be to convert the Amazon from a carbon sink into a [net source of carbon dioxide emissions](#).

Paulo Brando at the University of California, Irvine and his colleagues developed a model to predict how climate change and deforestation in the southern Brazilian Amazon, a

wildfire hotspot, are likely to influence wildfires and their associated greenhouse gas emissions.

The model predicts a doubling in the area burned by wildfires from approximately 3.4 million hectares across the 2000s to about 6.8 million hectares in the 2040s, in the worst case scenario of deforestation and rapid climate change. By 2050, the total area burned is predicted to reach 23 million hectares – 16 per cent of the existing forests in that part of Brazil.

**Read more:** [Amazon deforestation officially hits highest level in a decade](#)

“We have to reduce deforestation to tackle the biggest problem,” says Brando. In Brazil, 100 per cent of wildfires are started by people, often as part of agricultural practices, he says. “We can do better than we are doing right now.”

“Unlike Australia where bushfires can propagate, in the Amazon they only propagate to a few hundred metres because the forest is very wet,” says Carlos Nobre at the University of São Paulo in Brazil, who wasn’t involved in the study. But it is getting hotter and drier due to climate change and other factors, which means the Amazon is likely to become more vulnerable to spreading wildfires in future, says Nobre.

The Amazon removes between one and two billion tonnes of carbon dioxide from the atmosphere each year, equivalent to 2.5 to 5 per cent of global emissions. If wildfires increase, eventually the total emissions resulting from fire will exceed 2 billion tonnes, turning the Amazon into a net carbon source.

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