## Tropical forests now release more carbon than trucks and cars in the US, study finds

The Amazon Forest contributes to global carbon emissions. Caesar Oleksy Not only do tropical forests now emit double the amount of carbon they consume — they also release more of it than all vehicles in the United States, according to a new study.

Scientists at the Woods Hole Research Center, a climate change think-tank, found that tropical forests, once a "carbon sink," actually release "a net source of (425 teragrams of) carbon to the atmosphere" each year, according to CNBC.

The researchers used laser technology and satellite images to see how the tropical forests have changed since 2003 and determined the forests now emit 862 teragrams of carbon while consuming just 437.

Alessandro Baccini, the study's lead author, said in a statement that "these findings provide the world with a wake-up call on forests."

"If we're to keep global temperatures from rising to dangerous levels," he said, "we need to drastically reduce emissions and greatly increase forests' ability to absorb and store carbon."

Around 70 percent of tropical forest emissions are caused by degradation, and not deforestation, which just accounts for 10 to 15 percent, according to CBC.

The researchers said it's the first time the effects of forest degradation — a more subtle form of damage to the tropics than deforestation — have been documented in a study, according to CBC.

Ending both tropical forest deforestation and degradation could result in an 8 percent reduction of global carbon emissions, according to the researchers.

"Throughout the tropics you have selective logging, or smallholder farmers removing individual trees for fuel wood," Wayne Walker, a co-author in the study, said in a statement. "These losses can be relatively small in any one place, but

added up across large areas they become considerable."

About 60 percent of the tropical emissions came from Latin America, including the Amazon, which is the world's largest rainforest, according to the Independent. Africa was second place with 24 percent of emissions, with Asia at third place with 16 percent.

That alarms Baccini.

"Forests are the only carbon capture and storage 'technology' we have in our grasp that is safe, proven, inexpensive, immediately available at scale, and capable of providing beneficial ripple effects," he said, "from regulating rainfall patterns to providing livelihoods to indigenous communities."

According to NASA, carbon dioxide levels "surpassed 400 (parts per million) for the first time in recorded history" in 2013. That 400 parts per million threshold has for many scientists been a "clear red line into a danger zone of climate change," according to an article published by the Yale School of Forestry and Environmental Studies.

Source: http://www.sacbee.com/latest-news/article176349706.html

[Disclaimer]