
Myth No. 12: Tree plantations as carbon sinks help to address climate change by offsetting carbon emitted from fossil fuels

From a climate perspective, tree plantations not only are not a solution. They also add yet more problems. It is impossible to predict how much carbon any plantation could remove from the atmosphere, and for how long. Unlike subterranean oil or coal, carbon stored in trees is "fragile": it can quickly reenter the atmosphere at any time through wildfires, storms, insect infestation, disease and decay.

When tree plantations are harvested, it is very difficult to track the carbon stored in the wood. Some of the paper and wood products may be burned almost immediately; others may decay more slowly; still others may enjoy a somewhat longer life in housing or furniture; and some may be landfilled, which could lead either to long-term sequestration or to dangerous releases of methane, depending on circumstances.

This is only the beginning. In order to be able to claim credibly that a tree plantation "compensated for" a certain quantity of CO₂ emitted, carbon-plantation proponents would have to factor in a figure representing the degree to which their plantations destroyed existing carbon reservoirs, thus adding CO₂ to the air.

Moreover, any communities displaced from carbon plantations would have to have their activities monitored closely for (say) a century, no matter where they had migrated to, to determine precisely what impact they were having on forests or grasslands elsewhere, thus releasing the carbon stored in those ecosystems to the atmosphere.

For those and a long list of other reasons, large-scale "offset" plantations, instead of mitigating global warming, could even make it worse. In delaying the phaseout of fossil fuel mining, the transition to a more equitable distribution of emissions, and more sensible energy and transportation use, such plantations could result ultimately in an increased amount of avoidable carbon emissions both from industry and from the land.

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