

Sinking Australia with billions and trillions of trees



Tree planting projects have become widespread around the country. Credit: Decarbonology

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Marie Low is a regional and rural journalist based in Gunnedah, NSW.

Projects across Australia and across the globe are hanging their climate change credentials on planting trees – thousands of trees, millions of trees, and in some cases, trillions of trees.

But is it enough to put the brakes on climate change?

[Carbon Positive Australia](#) raises money to plant native trees and vegetation on degraded land across Australia. It is one of the many charities and organisations that have mushroomed in the past decade offering ways to take climate action.

It says safeguarding and restoring the landscape through tree planting “could reduce over 50 gigatonnes (50,000,000,000 tonnes) of carbon emissions that would otherwise enter the atmosphere”.

“Maintaining our Australian landscapes through the planting of native trees can, and does, make a difference in reducing climate change,” the charity says.

Forests are what is known as a “carbon sink”. The trees absorb carbon dioxide from the atmosphere during photosynthesis as they grow.

But the amount trees can absorb is finite, and they release carbon dioxide as they decay or, as has been the case more and more often in Australia recently, burn.

Tree planting and revegetation has become a major focus of carbon sequestration, both through carbon credit schemes and charities.

In 2014, the Australian Government launched the [20 Million Trees Program](#), with the aim of planting 20 million trees by 2020 to meet the objectives of environmental conservation, community engagement and carbon reduction. The program resulted in the planting of more than 29.5 million trees and 4.06 million understorey plants in 235 projects.

While the amount of carbon that trees sequester varies, the report on the program set the likely range of sequestration at 0.005 to 0.01 tonne of CO₂ per average tree per year over the first 30 years of its life.

“Using this average, 29.5 million trees of over 2m height could indicatively sequester on average 147 to 295 ktCO₂-e per year, or 1.47 to 2.95 million tonnes CO₂ over the decade from 2021 to 2030,” the report notes.

To put that into perspective, Australia’s total emissions of carbon dioxide equivalent were [463.9 million tonnes](#) in 2022 alone.

Although The [Australia Institute](#) has serious doubts about the integrity of carbon credits and the [Climate Council](#) says they “do little” to tackle the climate crisis, tree planting schemes are blossoming throughout Australia.

Under the Emissions Reduction Fund administered by the Government’s Clean Energy Regulator, environmental plantings projects earn 1 Australian carbon credit unit (ACCU) for each tonne of carbon dioxide equivalent stored in the project trees as they grow.

[Trillion Trees Australia](#) (once known globally as Men of the Trees), notes that if the more than 7.5 billion people on the planet planted 140 trees each, that would amount to one trillion trees. The World Wildlife Fund Australia’s aim is to [plant 2 billion trees](#) by 2030 as a “natural climate solution to global heating”.

Carbon Positive Australia says it has been involved in the planting of close to 7.5 million native trees, capturing 669,023 tonnes of carbon and restoring 5,406 hectares.

Director of Australian carbon reduction consultancy [Decarbonology](#) Cameron Edwards says the organisation has partnered with Noongar Land Enterprise Group, Workpower, Peak

Environmental, Infranomics, Native Nomads and Chatsfield in Western Australia with the goal of planting 1 million native trees.

“We started planting in 2021 and have planted over 324,000 trees,” Edwards says. “Our Plant a Native Tree program is a success, and continues to grow.

“We aim to sequester as much carbon as possible while also increasing biodiversity, rejuvenating the soil, protecting waterways/endangered species and improving our community.”

In the November 2022 report [Australia’s Carbon Sequestration Potential](#), the CSIRO notes there is no silver bullet to storing enough carbon to negate climate change.

“Australia has good opportunities to sequester carbon via a range of technologies. Each of those technologies alone is not sufficient to provide a pathway to Australia’s emissions reduction target.

“Rather a portfolio approach combining the best set of technologies will be required.”