Logging bigger risk than realised: study

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WILD eucalypt forests across south-eastern Australia store far more carbon than previously thought, according to research that has far-ranging implications for climate change policy. The Australian Greenhouse Office and the Intergovernmental Panel on Climate Change have underestimated the amount of carbon held in native eucalyptus forests and soils by up to 400 per cent, researchers at the Australian National University say.

"There is much more carbon in our natural forests than we thought," said Brendan Mackey, a professor at the Australian National University, who led the research group. "This means the potential amount of avoided emissions is much larger, and therefore there's much more to be gained from protecting them from logging. It means the risks of logging are bigger than we thought."

The study found that Australia's 14.5 million hectares of undisturbed eucalypt forest holds 9.3 billion tonnes of carbon in its wood and soil, offsetting about 460 million tonnes of carbon emissions each year for the next century.

Figures from the Intergovernmental Panel on Climate Change, the world's peak organisation for climate change study, showed the same forests as capable of storing 3.1 billion tonnes. The Federal Government's accounting system also underestimated the carbon storage, because it is designed to measure biomass growth in reafforestation and plantation forests, rather than dense bushland that has never been disturbed.

"To be fair to the IPCC and the greenhouse office, these are their default volumes," Professor Mackey said. "They were calling for better local data and we have produced that."

Although young plantations absorb carbon quickly as they grow, this does not compensate for the big carbon losses when established forests are cut down for the first time, the university team found.

The report, which draws on decades of research into soil and wood samples as well as new field work, examined carbon storage at 240 sites across southern NSW, Tasmania and Victoria.

The most carbon-rich treescapes are those dominated by the Eucalyptus regnans, or Mountain Ash, found in Tasmania and Victoria's central highlands.

The research has implications for climate change policy because it shows that leaving existing forests alone is a better way of storing carbon than replanting, Professor Mackey said.

The Government's discussion paper on carbon trading, released last month, proposed that carbon permits could be accrued by creating new plantation forests, but not by preserving existing forests.