



## Carbon and Koalas Collide: The Maths

### The science of trees, mapping and the carbon economy

Using a scientifically robust method for evaluating the amount of carbon stored in trees, we predict that a tree the size of a telegraph pole holds 1 tonne of carbon. If that tree was cut down it would need 2,000 saplings, planted over an area the size of two house blocks to replicate the carbon lost.



As the size of a tree increases, the amount of carbon stored, the number of baby trees required to replicate that amount of carbon, and the hectares required to plant those baby trees increase exponentially.

Tree dbh (cm)	Carbon (t)	Saplings required to replicate this amount of carbon	Hectares required to plant these saplings
10	0.05	100	0.01
20	0.34	680	0.068
30	0.98	1960	0.196
50	3.7	7400	0.74
100	22.1	44200	4.42
150	63.2	126400	12.64
200	133	266000	26.6

The older and larger the tree, the more valuable it is in the fight against climate change.

