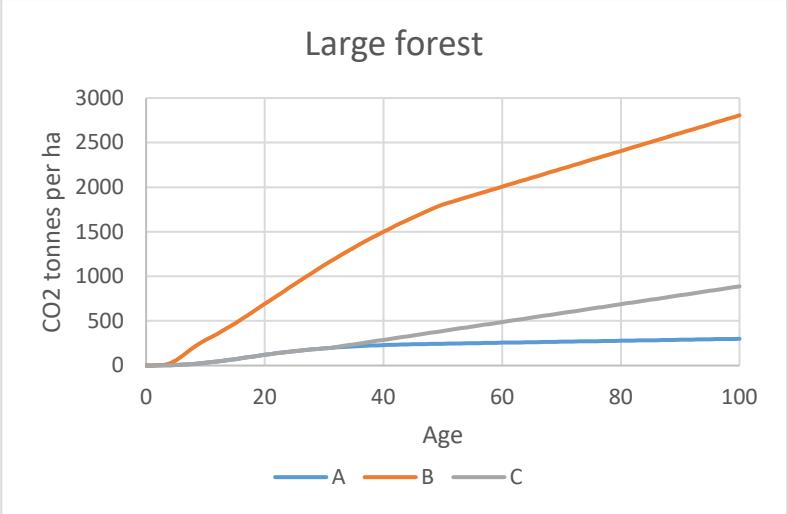

Carbon price

8 We assumed that the carbon price increase to a nominal value of $75 in 2050. When discounted, at 8% below, this result in a price of $41 in 2020$.

9 We believe that this provides a useful lower estimate of the carbon price in the 2050 as there is increasing evidence that, for the world to deliver on the Paris objectives of stabilising temperature both the global and domestic carbon prices need to increase. For example the Productivity Commission provides contrasting scenarios where the real 2050 carbon prices are between $75 and $250.

Other assumptions

Assumption	Value	Narrative.
Discount rate for investment	8%	A series of surveys[52] report post-tax implied discount rates of between 7% and 9% and pre-tax IDRs of 7% and 9% are typically used by the timber industry.
ETS registration costs	$650	Slightly above the current cost of registering forest (c$570) to account for the variable hour charge. .
ETS Emissions return	$122	
Forgone harvest income (if the site it suitable for harvest)	$15,000 per ha	If the land owner in scenario B, is forgoing harvest they do not receive the net income to the land owner from not harvesting pine forest. This is

52 Published in the New Zealand Journal of Forestry, e.g. Manley, 2018, Discount rates used for forest valuation - results of 2017 survey, New Zealand Journal of Forestry, 63(2): 35–43 http://nzjf.org.nz/new_issues/NZJF63_2_2018/A3797169-9AF6-41d8-A5AF-2CB6C03D8B02.pdf