Trading accuracy for simplicity (??):
A FullCAM story

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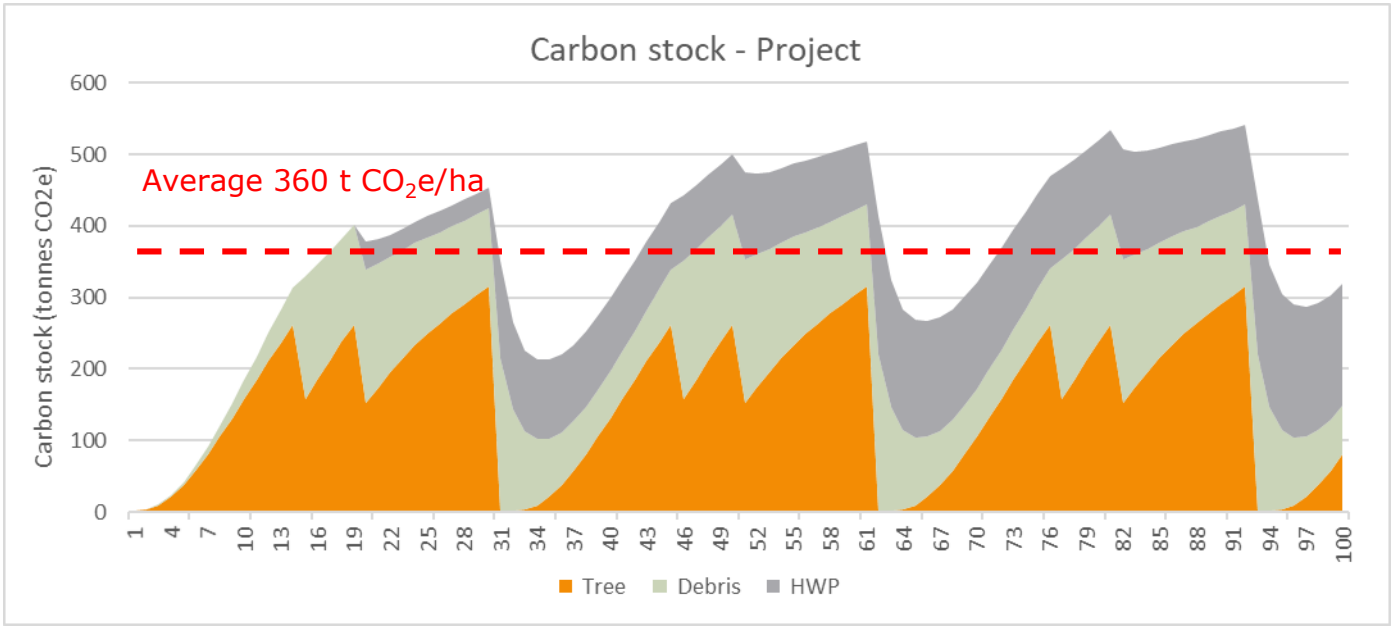
Plantation forestry methodology

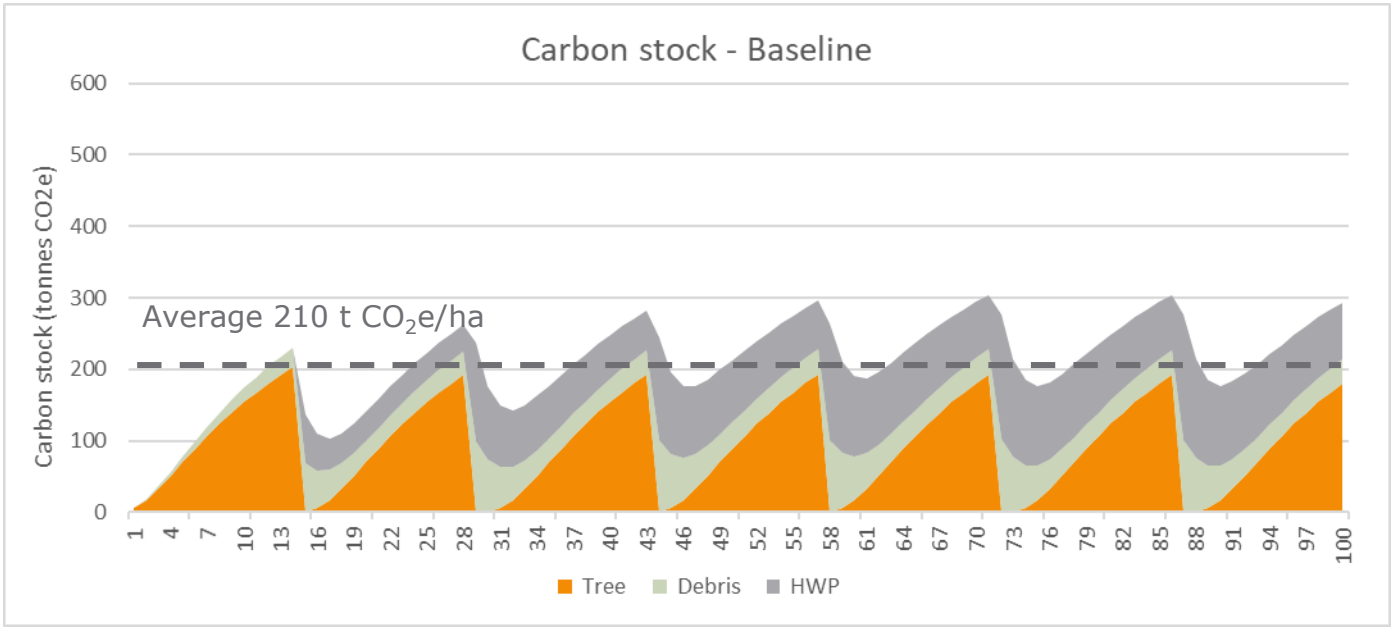
- 3 project types
  - New plantings
  - Conversion from short rotation to long rotation
  - Continuation of pre-existing projects under another applicable methodology

- Mandates use of FullCAM to derive carbon stock estimates
  - Cannot use inventory data or actual harvest yields

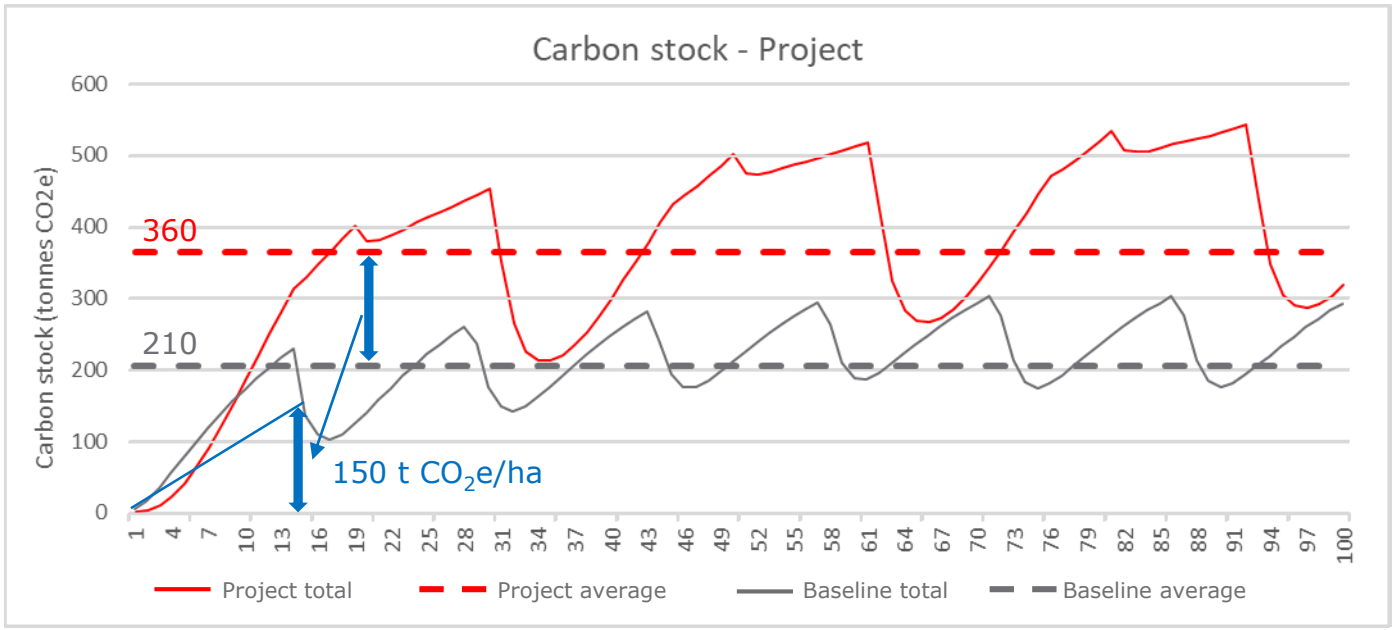
- Carbon stock estimates based on a productivity layer
  - 250m resolution, but underlying data reasonably coarse resolution (compared with variation in productivity)
  - Based on limited dataset of yields – not current

Conversion project - ideal



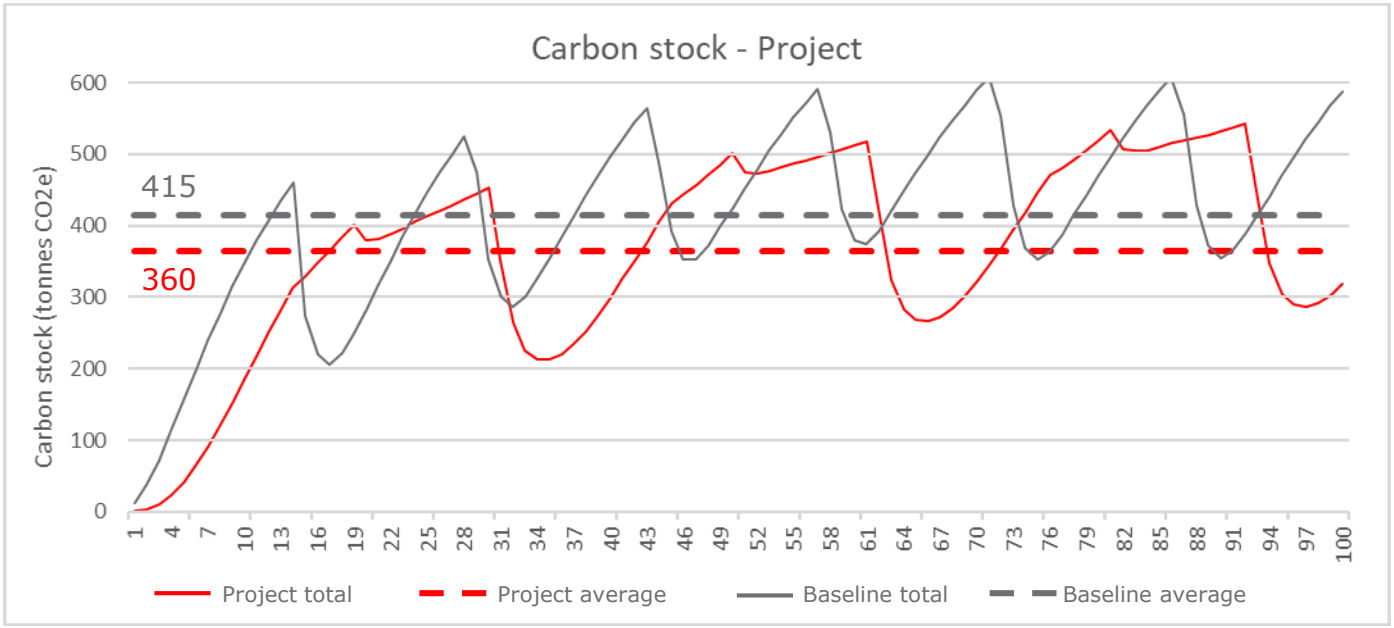


Conversion project - ideal



- Calculate difference between long-term baseline average and long-term project average
- Difference can be credited in 15 equal instalments over first 15 years of long-rotation planting

Conversion project – WA experience



Estimation of carbon stock – key parameters

	FullCAM as % of NF estimate	
	Project (pine)	Baseline (euc)
Stem volume	103%	190-270%
Wood density	102%	90-95%
Allocation to roots	100%	130%
Branches & leaves	108%	83%
Carbon fraction	100%	100%
Debris	n.a.	n.a.
Harvested wood products	n.a.	n.a.

Conclusions

- Over-estimation (or under-estimation) of productivity resulting in perverse outcomes
  - Projects unviable, despite having a real and measurable benefit
  - Reduced credit yield for some projects
    - Baseline over-estimated
    - Project under-estimated

- Increased risk for project developers
  - Potential over-crediting initially, with later correction as the system is updated with more accurate predictions

- Solutions:
  - Better calibration of underlying productivity layer (updated data)
  - Use of actual inventory data in FullCAM calculation process
    - Project specific data used in some other methodologies
    - Would add complexity to calculation process & audit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Thank you
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