Secondary processing and products
Secondary processing

- grading
- drying
- machining
Grading

- boards sorted by hardness
- high and medium hardness required for flooring
Drying

• Improves
  – stability
  – hardness
  – transport costs
  – strength and stiffness
  – resistance to pests
Kiln drying

- essential to reach target moisture content for export
- high energy costs offset by faster throughput
- complete control over drying conditions and quality
10 m$^3$ gas-assisted solar kiln was installed at Forestry Department to run research trials ($100,000$ FJD).
Machining

- Compared with most hardwoods, cocowood machines require:
  - sharper tool edges
  - more frequent maintenance
  - slower feed speeds
- Optimised feed speeds are now known for planing, moulding and sanding to produce excellent quality
Products

- Engineered flooring
  - Laminate pancake construction
  - Re-sawn
  - Glued to plywood
  - 133 mm x 15 mm
Products

- Flooring
- Furniture
- Columns
- Laminated bench tops
- Step treads
Secondary products

- Plant growing media and mulch
  - properties within suitable range
    (water retention, pH, etc)

- Ethanol
  - lower starch content than anticipated
  - probably not feasible

- Coreplate, blockboard
  - cocowood has suitable properties
  - competition from existing products