Solid Wood Innovation

Continuation of SWI

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Reasons why Australian companies should support SWI extension for two years?

1. SWI has delivered significant value for Australian companies
2. SWI investment offers 1:4 leverage on industry funds
3. Focus on tech transfer and deployment of technologies will continue
4. Further projects identified directly targeting Australian company needs
5. We do what we say we will do

Background

- Australian companies have supported SWI for the past 5 years through FWPA. $400k NZD per annum (to end May 2014)
- SWI is basically 50:50 split of NZ appearance manufacturers and Australian structural manufacturers – but there is good synergy and overlap - annual income has been $2 million
- NZ Government provides 1:1 cash leverage
- Australian companies enjoy good leverage on the portion of their levy that goes to SWI (4 times)
- SWI must meet the expectations of a wide range of stakeholders!

R&D programme?

- Priorities agreed by consultation at start
- Australian industry well organised and well co-ordinated through FWPA
- SWI has stuck to its commitments to Australian focussed projects
- Many projects ‘complete’ but further applications identified by industry
- Commercial implementation and tech transfer essential and has been major focus for past two years

R&D program: 2009-14

Green structural segregation

✓ 1. Log and cant segregation for stability
✓ 2. Green lumber segregation for stiffness and stability
✓ 3. Segregation systems to enable stable structural lumber to be manufactured and distributed at ~15% (Avg) moisture content

R&D program: 2009-14

Energy and water usage

1. ✓ Decision tools for comparing energy saving/utilisation options for Australian sawmills
2. ✓ Post drying steaming with reduced water and energy use and lower final moisture content variability
3. ✓ Dynamic schedule optimisation for kiln drying
4. ✓ Recovering, treating and utilising water from kiln drying

What has SWI delivered?

- A range of technologies for both the structural and appearance shareholders in primary breakdown, drying and manufacturing

  Commercially installed and operating (See separate handout)
- Trialling and testing of other potential technologies (e.g. warp prediction, ultrasonics for fingerjoint integrity, testing of CDK, voice tally)
- Input to resolution of key industry issues (e.g. low strength rogues, higher moisture content in standards)
- Tech transfer (e.g. Energy website, Best practise manuals, workshops, roadshows, on site kiln audits etc.)

Tech transfer to Australia has been a high priority!

Value for Australian companies from SWI investment

	Value per 100,000 cube lumber	National value	Status
Cant Opti	$250k [1]	$4M	• 2 (transverse) systems installed - potentially 4 more • Linear system now ready for deployment (2 possibles)
Reduced steaming	$150k [2]	$4.9M	• Widespread adoption • No capital required
Dynamic kiln schedules	$140k [3]	$4.5M	• 1 application • Some capital?
		$13.4M	

1. Assumes 50% of production through gang saws
2. Assumes 60% of production is dried
3. Sites needs variable speed drives on kilns

Continuation of SWI for a further 2 years?*

- Unfinished business -commercial uptake has been slow due to depressed industry
- Industry very satisfied with SWI performance and engagement
- Widespread concern that wood processing R&D capacity has been decimated over past 5 years - Stop gap?

Why two years? Because SWI can apply to extend existing contract with NZ Gov't out to 7 years

* At 50% of current funding level

What is proposed?

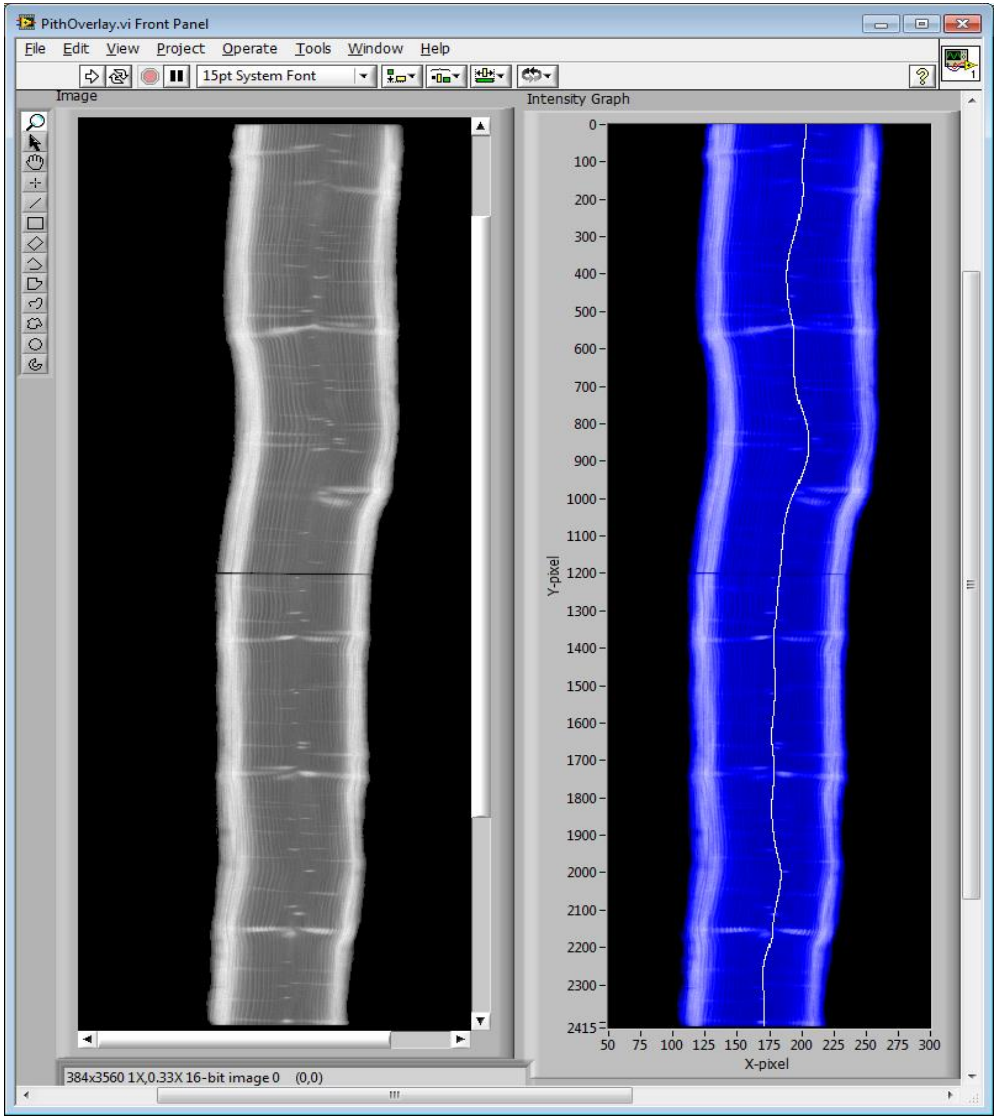
Commitment from NZ shareholders	NZ$250k
Australian companies	NZ$250k
Total per annum from companies	**NZ$500k**
NZ Government co-funding	**NZ$500k**
Total pa for 2 years	**NZ $1 M**

Research focus for two years?

- Develop and deploy linear Cant Opti tool
- Deploy stem/log technology for increasing in grade product yields. Value of around $5 per cube of log?
- Trial and deploy ultrasonics for end split detection
- Further tech transfer of kiln drying energy savings options
- Others

Further consultation with industry required!

Develop and deploy linear Cant Opti tool



D Fir green
150 mm cant

Density scan with estimated pith position overlaid on right

Where to from here?

ACTION	TIMEFRAME
Secure commitment through FWPA	March 2014
Finalise R&D program by discussion with stakeholders	April 2014
Prepare and submit application to MBIE (NZ Govt.)	April 2014