Gunns Ltd

Mill competitiveness falls while government subsidies rise April 2008 **ASX Code: GNS**

COST TO BUILD BELL BAY IS TOO HIGH

- Assuming a cost base of $2.0 billion, the unit cost to build Bell Bay is AUD$1,800/t or US$1,600/t at current rates.
- By contrast, Aracruz' Guaiba Unit is estimated to cost US$1,200/t.
- The latest estimate of $2.0 billion probably excludes $200 million for pipeline costs which Gunns hope to outsource to the Tasmanian State Government.
- It is possible that the final cost to build Bell Bay will be $2.4 billion if this subsidy does not happen.

BELL BAY FIBRE COSTS WILL BE US$227/t COMPARED TO US$103/t IN BRAZIL

- The location of the fibre resource shown in the Bell Bay IIS (70% in North East Tasmania at start-up) is inconsistent with Forestry Tasmania's published Wood Production Plans, which show a majority of its pulpwood in 2010 will be produced outside the North East.
- Similarly, the private native forest resource is spread across Tasmania.
- The average distance of fibre to Bell Bay mill is between 140km and 180km at start up. Veracel is 45km.
- The fibre cost to Bell Bay will be about AUD$258 per tonne of pulp, or US$227 at current exchange rates.
- The Hawkins Wright average for Brazil fibre costs in 2007 was about US$103.

Gunns Operation GO4706 Great Western Tiers 2008 **"messy and steep"**

INPUT COST FORECASTS FROM GUNNS ARE NOT CREDIBLE

- Gunns' March 2008 forecast of a cash production cost of AUD$330 appears very optimistic.
- It is very dependent on REC and energy credits, which are a risky base for an investment decision.

GOVERNMENT CONTINUES TO SUBSIDISE MILL BUT FOR HOW LONG?

- The Forestry Tasmania wood supply agreement includes major subsidies that imply real falls in wood supply prices and falling returns to Forestry Tasmania.
- The native forest floor price has locked in 2001 prices until 2012.
- The National Competition Council, National Audit Office and Tasmanian public are taking more note of these subsidies. They are not sustainable.

COMPARISONS WITH ARACRUZ ARE FLAWED

- Cost to build mills US$400/t cheaper
- Fibre costs US$100/t cheaper
- Fibre one third the distance to mills
- 100% owned plantation resource
- Diverse markets with 80% of sales secured to long term contracts
- An Investment Grade company on the Dow Jones Sustainability Index

The fibre resource at Aracruz' Veracel operations: **"like mowing trees"**

Personal research paper prepared by Naomi Edwards FIA FIAA FNZSA
Please address queries to naomi@bordernet.com.au
Photo of Gunns' re-growth logging operation courtesy Pete Godfrey

SECTION 1: COST TO BUILD BELL BAY IS TOO HIGH

Current cost estimates make Bell Bay internationally uncompetitive

Since announcement, the forecast cost to build the pulp mill has increased significantly. Importantly, however, construction has not yet commenced on the mill, and further surprises could be in store. Any increase in cost to build is extremely important for this mill, not only because the additional debt will further diminish the mill's international competitiveness, but also because the cost of debt is becoming higher all the time.

The following table shows the history of the Bell Bay cost to build.

Table 1.1 Bell Bay cost to build

Analysis by source	A$ Total Cost	Forecast working capacity	Average cost to build A$/t	Average Cost to Build US$/t AUDUSD 0.88
BELL BAY				
Original estimates	$1.4bn	820,000	$1,700	$1,500
Mid 2007 estimates	$1.5bn	1,000,000	$1,500	$1,300
March 2008 estimates	$2.0bn	1,100,000	$1,800	$1,600
Final likely cost	$2.4bn	1,100,000	$2,200	$1,900
ARACRUZ PULP MILLS				
Barra do Riacho (2005)				$970[1]
Guaiba Unit (2010 startup)	US$1.5bn	1,300,000		$1,200[2]

The comparison of Bell Bay Cost to Build with Aracruz' Guaiba Unit is very telling. Aracruz expect the mill cost to build to be between US$1,100/t and US$1,200/t. By contrast, Gunns latest forecast is for Bell Bay to cost US$1,600/t.

Final cost to build is likely to exceed $2.0 billion

The cost estimate given by Gunns in March 2008 of $2.0bn to build Bell Bay appears to have excluded some significant costs, because at this stage Gunns was likely to have been negotiating with the Tasmanian state government to take over (subsidise) two major cost components of the mill. In particular:

- The 19km effluent pipe from the pulp mill to the Five Mile Bluff ocean outfall on Bass Strait.
- The 36km water pipeline from the Trevallyn Dam to the mill site 36km north of Launceston.

These pipelines represent a major cost component for the mill. The pipes are likely to be built using mscl pipe, (mild steel, concrete lined) with an average cost of about $1,200 per meter.

[1] Aracruz Cellulose Form 20F Filing to the US SEC
[2] Aracruz Investor Presentation Q2 2007

Total cost $66 million. To this must be added the cost of works at Trevallyn, the pumping stations, crossing the Tamar and all its tributaries, crossing various highways, the venting points at Doctor's Hill, compensation for landowners, rock blasting at various points and the cost of laying the ocean outfall pipe. The total cost of 55km of pipeline is probably close to $200million.

The Tasmanian state government is currently considering whether to finance and build these pipelines by declaring them "essential state infrastructure"[3]. This would have two advantages to Gunns:

- It would reduce cost to build by up to $200m, which has probably already been factored in to Gunns' March estimate.
- It would solve the problem Gunns currently has, that local landowners are refusing to let Gunns put the pipelines through their properties. By pulling out of the RPDC process, Bell Bay lost its designation as a "Project of State Significance" which meant that it lost the right to compulsorily acquire land near the mill. If the pipelines were deemed "essential state infrastructure" then Gunns effectively - through the Tasmanian Government - would re-acquire this right.

The risk to Gunns is that this subsidy does not proceed. The government is still considering the proposal but there has already been:

- Adverse publicity surrounding the level of the subsidy
- Strong resistance from local landowners
- Legal advice that the proposed government subsidy will necessitate the project being resubmitted to the Commonwealth for further EPBC assessment[4].

Most analysts are already including a loading of another $100 million in the cost to build estimate for contingencies. Adding this $200 million, there is a risk that the cost to build will end up being closer to $2.4 billion than $2.0 billion. At US$1,900/t, compared to Guaiba at US$1,200/t, this saddles each Bell Bay tonne with an extra $700/t over the mill lifetime or $63/t at a 9% WACC.

[3] "Public Money in the Pipeline" The Mercury March 3 2008
[4] Fitzgerald and Browne Lawyers, 3 March 2008, Legal Advice to The Wilderness Society

SECTION 2: BELL BAY FIBRE COSTS WILL BE US$227/t COMPARED TO US$103/t IN BRAZIL

Understanding the Long Term Pulpwood Supply Agreement

Gunns' fibre costs are driven by the ownership and location of the fibre resources. At start up, over half of the fibre to the mill will be supplied by Forestry Tasmania under the Forestry Tasmania Long Term Pulpwood Supply Agreement dated 20 December 2007 ("the LTPSA")[5].

In understanding Gunns' fibre costs, it is therefore important to understand the LTPSA. Key feature of the LTPSA are:

1. State forests in central and North East Tasmania have their management, harvesting, roading, supervision and administration outsourced to Gunns. Other users of the forests will have to negotiate with Gunns, not with Forestry Tasmania. Gunns will now be responsible for such matters as building roads, fire control, environmental compliance, harvesting schedules and so on.
2. State forests in the South and North West of Tasmania will continue to be managed by Forestry Tasmania, but the fees charged to Gunns for management, harvesting, supervision, roading, cartage and administration will be "at cost" only. In other words, no profit margin is built into the price charged, and if Gunns can establish that its own costs would be lower than Forestry Tasmania's, then a price adjustment is made or Gunns is entitled to take over management of the activity / forest.
3. This report has therefore used the fee schedule set out in the LTPSA (for Forestry Tasmania managed forests) as suitable for native forests managed by either Forestry Tasmania or by Gunns. This reflects the "at cost" basis of the pricing, and reflects Forestry Tasmania's long experience and economies of scale in managing native forests. Gunns is unlikely to be able to manage state native forests cheaper and has presumably negotiated the LTPSA based on its own assessment of true underlying costs.

Impact of Distance on Fibre Costs is Significant

In its IIS, Gunns has given a variety of analyses of its initial fibre sourcing for the mill. Most important, in terms of costs, is the analysis by distance to mill and the analysis by source.

[5] http://www.forestrytas.com.au/assets/0000/0327/gunns-ltpsa.pdf

Table 2.1 Source and distance of fibre to mill at start-up

Analysis by source	Tonnes (000) as per IIS	Analysis by type / location	Tonnes (000) as per IIS	Forestry Tasmania 2010 Production Tonnes (000)[6]
Gunns owned	350	North East Plantation	640	150
Sawmill residue	200	North East Native	2,240	810
Forestry Tasmania	1,600	South East Native	320	750
Private Forest	1,050			
TOTAL	3,200		3,200	1,710

A very important issue arises from Table 2.1. At start-up, over half of the fibre to the mill will be provided by Forestry Tasmania (some 1.6 million tonnes). Forestry Tasmania just has enough wood to cover this (although note that Forestry does of course have other customers). But look at the location of the Forestry Tasmania wood. *Almost half of Forestry Tasmania's scheduled wood production is in the South East, not the North East.*

This is a very important problem to understand. Gunns has stated that "Bell Bay will have a highly competitive position on the global cost curve, driven by proximity of mill to fibre…". But how close is this mill to its native forest fibre sources? For Forestry Tasmania fibre, the answer is 'not very close'.

Consider the following distances of Forestry Tasmania fibre to mill.

Table 2.2 Distance of Forestry Tasmania fibre to mill

Forestry Tasmania District	2010 Planned Volumes (tonnes 000)	Distance to Bell Bay
Murchison (West)	282	160
Mersey (North East)	180	70
Bass (North East)	630	40
Derwent (South East)	569	190
Huon (South East)	183	330
Total FT Native Forest Production	1,560	
Weighted average distance to Bell Bay (my estimate)		136km
Veracel average distance to mill[7]		45km

Consider the impact of these distances on cartage costs. The table below shows commonly used cartage rates for log transport in Tasmania and is likely to be conservative.

[6] Forestry Tasmania Three Year Wood Production Plans 2007/08 to 2009/10. Native forest numbers scaled down by 13% to reflect excluded zones under LTPSA.
[7] Aracruz Q2 2007 Investor Presentation

Table 2.3 Log Cartage Rates in Tasmania 2007

Distance	Cartage Rate/tonne	Distance	Cartage Rate/tonne
30	$7.20	150	$19.50
60	$10.80	180	$23.40
90	$13.50	210	$27.30
120	$16.80	240	$31.20

The LTPSA backs up this analysis. The contract says "The average cartage rate is deemed to be $24 per green metric tonne at contract commencement". Under current cartage rates a cartage charge of $24 corresponds to a distance of about 180km to the mill. This exceeds the estimate I have made above of 136km.

Rail is not a solution to this distance problem. The State Government, recognising the long distances that pulpwood will travel to the mill, has committed to subsidise an upgrade and extension of state rail capacity to extend North-South log pulling capacity[8]. But rail has been shown to be an expensive option in New Zealand where rail has consistently been dismissed as a log transport option despite long standing community pressure for rail to be used. This is because the short distance from the siding to the rail head is high cost (because loading and unloading costs are doubled with a rail operation and any savings achieved in the haul are foregone by the additional handling costs).

Does it matter that the average distance of fibre to the mill is 140km or 180km and not 45km? The answer is, of course, yes, as we find out when we do a bottom up analysis of Gunns' fibre input costs, as per the LTPSA.

Table 2.4 Cost of fibre under LTPSA

Component of fibre cost	Cost $AUD per green metric tonne	Cost $AUD per tonne pulp (four tonnes fibre)	Cost USD per tonne pulp (AUDUSD 0.88)	Fibre cost USD per tonne pulp – Brazil Average 2007
Stumpage (Note 1)	$13.5	$54	$48	
Road Toll (Note 2)	$6	$24	$21	
Supervision & Administration (Note 3)	$1	$4	$4	
Harvesting (Note 4)	$20	$80	$70	
Cartage (Note 5)	$24	$96	$84	
TOTAL (Note 6)	$64.50	$258	$227	$103[9]

Notes to table

Note 1. Base Stumpage
The Base Stumpage is blacked out in the latest (final) LTPSA. A published draft of the LTPSA

[8] The Examiner 3 April 2008
[9] Hawkins Wright. See note below Table 3.3 below for a full derivation.

had a base stumpage of $15.75. The LTPSA has a stumpage floor price of $12.50 at start up. Under the LTPSA, stumpage moves in line with world pulp price indices. Assuming a base price of $15.75, which seems reasonable given the context of the stumpage formula, stumpage moves in line with the pulp price index (PPI) as follows:

Table 2.5 Schedule of LTPSA native forest stumpage

PPI USD	Stumpage per GMT	PPI USD	Stumpage per GMT
400	$12.5	620	$14.3
440	$12.5	660	$15.0
480	$12.5	700	$15.8
530	$12.8	750	$17.5
570	$13.5	800	$19.2

The analysis in Table 2.4 has assumed a base stumpage of $13.50, corresponding to an average pulp price of USD$570.

Note 2. Road Toll
Gunns is required to pay a Road Toll to Forestry Tasmania for the upkeep and building of forestry roads to the native forest coupes in Forestry Tasmania managed areas. In areas where Forestry Tasmania has outsourced the harvesting and road management to Gunns, Gunns is not required to pay the toll and can charge the toll to other forestry road users. In this case Gunns will incur the costs of road maintenance and building itself. The analysis assumes that the road toll estimated by Forestry Tasmania is close to the actual costs of road maintenance and building, so it therefore applies in either case. Page 76 of the LTPSA details the road toll, which varies from $5.16 to $7.72 per green metric tonne. This analysis assumes an average road toll of $6/t.

Note 3. Supervision and Administration
Gunns is required to pay Forestry Tasmania a supervision and administration fee of $1 per green metric tonne in Forestry Tasmania managed coupes. Our analysis assumes that this cost is also indicative of supervision and administration costs in coupes managed by Gunns or its contractors.

Note 4. Harvesting
The LTPSA has blacked out the agreed harvesting charges. It does say that the average cost charged to Gunns must represent Forestry Tasmania's true underlying harvesting costs, and that if this differs from Gunns' own harvesting costs, an adjustment will be made or the harvesting will be outsourced to Gunns. I have discussed harvesting costs with industry sources who say that $20 per green metric tonne is a conservative average harvesting cost for native forests. Harvesting plantation timber is, of course, cheaper.

Note 5. Cartage
The LTPSA has blacked out the agreed cartage charges. However Page 83 of the LTPSA, dealing with defects and overload penalties, does mention that "The average cartage is deemed to be $24 per green metric tonne for the period from the Commencement Date…". I have used this rate in the analysis above.

Interestingly, a cartage charge of $24 corresponds to a transport distance of about 180km from forest to mill door. This distance supports the mapping analysis I have done in Table 2.2 above which estimates an average distance to mill of 136km.

Note 6 Total Fibre Cost under LTPSA
Under the LTPSA, the total fibre cost to the mill is US$227/t, at current exchange rates. By comparison, the average fibre cost to Brazilian pulp mills was US$103/t, exactly half of the Bell Bay fibre costs.

Cost of fibre which is not from state native forests

The analysis above has dealt primarily with the 50% or so of fibre sourced from state native forests under the LTPSA. Will other fibre cost more or less than this?

The second largest source of fibre to the pulp mill is privately owned native forest. This also is not very close to the mill. Looking at the map of privately owned forest locations for the pulp mill, it is clear that over half of the resource is located in the South of Tasmania (average distance 330km to Bell Bay). The green marks are private native forest and the blue marks are private plantation forest.

Figure 2.1 Privately Owned Resource Locations

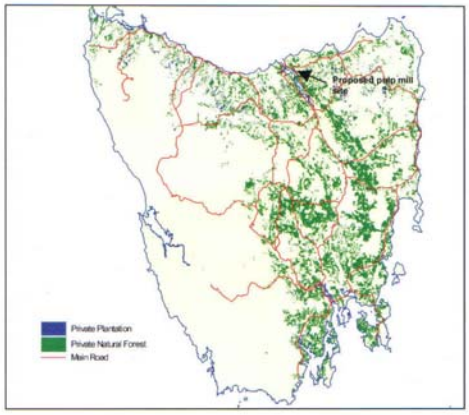

Figure 6-7 Privately Owned Resource Locations [Source: Private Forests Tasmania]

Given the large distance of the privately owned native forest from the mill, native forests on private land managed by Gunns is assumed to have the same underlying cost structure as state native forest.

The IIS says that at start up about 20% (or 640,000 tonnes) of fibre will be sourced from North East plantations. We know from Forestry Tasmania's own production plans, that it can only supply 150,000 tonnes of this, therefore we can assume that most of this plantation fibre comes from Gunns' managed plantations in the North East. Some of these plantations are owned by Gunns and some are managed on behalf of private owners. Either way, these plantations have generally been established under MIS schemes, and include floor price guarantees in the MIS offers.

For example, the 2006 Woodlot Project gives investors a minimum stumpage return of 39% of the FOB price for hardwood wood fibre exports at the time of harvest. The Woodlot prospectus says "At today's FOB price of $178/BDMT (2006), the pulpwood floor price stumpage at clearfall would equate to $33.36/GMT"[10]. Thus stumpage for plantation wood is over $20/t more expensive than native forest, or $80/t more expensive per tonne of pulp. While the yield from plantation wood is somewhat better than native forest, the difference is not enough to materially impact this additional cost.

Other components of plantation fibre are cheaper that native forest. The harvesting and cartage are likely to be cheaper. The table below summarises the various types of fibre, and their costs, that Gunns will use to feed the pulp mill at start-up. While plantation forests in the North East have much lower cartage and harvesting costs than native forest, they have much higher stumpage costs as discussed above.

Table 2.6 Cost of fibre to Bell Bay weighted by source

Cost of fibre to Bell Bay pulp mill – all sources.	Native forest sourced under LTPSA	Plantation forest sourced under LTPSA	Native forest managed by Gunns (private forest or Gunns)	Gunns North East plantations
Stumpage	$13.5	$27[11]	$13.5	$33
Road Toll	$6	$6	$6	$3
Supervision & Administration	$1	$1	$1	$1
Harvesting	$20	$15[12]	$20	$15
Cartage	$24	$15[13]	$24	$10[14]
TOTAL	$64.50	$64	$64.50	$62
Assumed volume sourced at start-up	1,450,000	150,000	1,110,000	490,000
Weighted Average Fibre cost AUD/GMT	$64			

It seems difficult to avoid the conclusion that Gunns' average fibre costs will be around $64 per green tonne delivered to the mill.

The rest of this report assumes an average fibre cost of AUD$64.50 per green metric tonne, AUD$258 per tonne of pulp or US$227 per tonne of pulp (fibre input only).

[10] Page 19 Gunns Woodlot Project 2006 Product Disclosure Statement
[11] $27 is the plantation stumpage floor price set out on Page 63 of the LTPSA. This is a minimum – in most years the stumpage would be higher but it cannot be lower.
[12] Assume that harvesting plantation forest costs 25% less than harvesting native forest
[13] See Table 2.3 above
[14] See Table 2.3 above

SECTION 3: INPUT COST FORECASTS FROM GUNNS ARE NOT CREDIBLE

Gunns' March 2008 Analyst Briefing

In March 2008 Gunns issued a half year analyst briefing pack, which included a project update on the pulp mill. This update asserted that total delivered costs to Shanghai for Bell Bay pulp would be US$330/t. Underlying this delivered cost, were the following cost estimates:

Table 3.1 Gunns' March 2008 Input Cost Analysis

Input cost	Gunns March 2008 (AUD)
Fibre costs	?
Chemicals, Water and Energy	?
Variable Costs	$250
Fixed Costs (Labour, Maintenance)	$80
Cash production cost	$330
Ocean freight and sales	$70
Total costs	**$400**

Of great interest is the Gunns assertion that its total variable costs will be AUD$250 per tonne of pulp. The previous section showed that Gunns' fibre costs alone will be about AUD$258 per tonne of pulp. Gunns' forecasts of $250 variable costs therefore assume that the pulp mill's net chemical, water and energy costs will be zero after allowing for "a credit for the sale of surplus power and Renewable Energy Credits (RECs)."

In 2004 the world average chemical and energy costs for BHKP pulp mills was USD$45/t [Hawkins Wright, Defining the China Market for Pulp, Paper and Board 2004], or AUD$51/t using an exchange rate of 0.88. Since then, world pulp input costs have risen across every country, by an average of 6% per annum in the newer mills (see Table 3.2 below). This equates to an input cost increase over the last three years of some 20%, so we can assume that average chemical and energy costs for pulp mills are now around AUD$61/t. Many of these pulp mills, like Bell Bay, generate their own power and are net power exporters.

So will Bell Bay generate revenue of AUD$61/t from its RECs and energy sales? This seems an extremely optimistic scenario. Early analyst reports estimated that the net energy benefit from the pulp mill ranged from AUD$25/t to AUD$35/t. Gunns costs forecasts are thus very dependent on energy sales and REC credits. There are a number of problems with this:

- Although the Renewable Energy Regulator has indicated that wood wastes are likely to be eligible for RECs, the area is currently under major review and many changes could still arise in this area. As of the end of 2005 there was only one REC accredited black liquor - wood waste power station in Australia.[15]

- Some mainland electricity suppliers have indicated that they will not purchase electricity from Tasmania that has been generated through burning native forest wood wastes. Until Gunns

[15] http://www.orer.gov.au/publications/pubs/rec-system0506.pdf

gets accreditation as a creator of tradeable certificates, it is difficult for it to reliably forecast what its net revenue from sale of RECs will be. Gunns has in the past tended to overstate benefits and understate risks. It thus seems extremely risky to base an investment case for the pulp mill on these values. But without them, the pulp mill fails to compete.

Global BHKP production costs have increased significantly

Global BHKP production costs have increased significantly since the Bell Bay pulp mill was first financially assessed. Most analyst reports, when initially considering the mill, used Hawkins Wright cost input figures dated 2004. The table below shows the same Hawkins Wright statistics, updated to second quarter 2007 for three countries.

Table 3.2 Input cost per tonne of delivered pulp - $US per tonne – Hawkins Wright[16]

Input cost	Brazil 2007	Brazil 2004	Indonesia 2007	Indonesia 2004	Finland 2007	Finland 2004
Wood costs		$71		$102		$243
Chemicals and Energy		$38		$31		$40
Variable Costs		$109		$134		$283
Fixed Costs (Labour, Maintenance)		$44		$52		$77
Cash production cost	$244	$153	$215	$185	$441	$360
Ocean freight and sales	$65	$60	$76	$49	$43	$46
Total costs	**$309**	**$214**	**$291**	**$234**	**$484**	**$406**
Annual Increase	**13.0%**		**7.5%**		**6.0%**	

Compare Gunns' forecast cash production cost (AUD$330) to the Hawkins Wright figures for 2007. I have shown the comparison at two exchange rates.

Table 3.3 Cash Production Costs

Input cost		$USD/t
Brazil		$244
Indonesia		$215
Finland		$441
	AUD/USD 0.88	AUD/USD 0.75
Gunns' forecast Bell Bay (AUD$330)	$290	$247
Fibre cost only of Bell Bay (AUD$258)	$227	$194

[16] 2007 Hawkins Wright figures from Aracruz Presentation to UBS Pactual Ninth Annual CEO Conference Sao Paulo Feb 19 2008

Is it credible that Bell Bay production costs can be $247 (AUDUSD 0.75) when average Brazilian cash production costs were already $244 in 2007? Consider the components of cash production:

1. Fibre – Bell Bay fibre will cost US$194/t to US$227/t (see Section 2 above). In 2004, average Brazilian fibre was US$71/t. Inflating Brazilian fibre at 13% over the last three years (the average annual increase from Table 3.2 above), we still have an average fibre cost of US$103/t compared to US$194/t for Bell Bay.
2. Chemicals – unlikely to be any cheaper in Australia than Brazil.
3. Energy – both Brazilian mills and Bell Bay are net sellers of energy.
4. Labour and maintenance – likely to be much cheaper in Brazil.

Gunns' most recent forecasts thus appear extremely optimistic and very dependent on energy and RECs sales.

SECTION 4: GOVERNMENT CONTINUES TO SUBSIDISE MILL BUT FOR HOW LONG?

New public subsidies since 2006

I addressed the known public subsidies to the pulp mill in my September 2006 Submission to the RPDC. Bell Bay has already received project development assistance and Community Forest Agreement grants. The pulp mill is dependent on the continuation of a number of subsidies, including:

- Ongoing tax concessions to MIS schemes
- An $80million commitment to upgrade the East Tamar and other roads needed for mill traffic
- A $120 million commitment to upgrade rail transport to the mill.

Since then, two new subsidies have arisen:

- The water and sewage pipelines being constructed by the government. (Still under consideration – see Section 1 above for a detailed discussion)
- The very large implicit subsidies in the LTPSA signed with Forestry Tasmania.

The LTPSA subsidy arises for at least three reasons

1. The floor price locks in a 2001 fibre price until 2012

The floor price of $12.50/GMT for state native forest applies until 31 December 2012. In 2006, the Head of Forestry Tasmania told a Government Committee that the "the average prices for Tasmanian pulpwood are not secret, the native forest average price is $12 to $14 per green metric tonne"[17]. In 2001 the Head of Forestry Tasmania said that the "average price paid to Forestry Tasmania for native wood is $11 to $12 per tonne"[18].

At $12.50, the LTPSA floor price is thus the same as the rates being charged for pulpwood in 2001. Over the period 2001 to 2012, assuming a CPI increase of 2.5%, the stumpage price has fallen in real terms by about 25%.

2. The floor price inflation factor significantly lags expected CPI

The topic has been extensively dealt with in a paper by Associate Professor Graeme Wells[19]. In this paper, Professor Wells shows that over the twenty year contract, the real floor price paid to Forestry Tasmania will fall by 10% in real terms (assuming CPI of 2.5%). The fall is about 8% from 2012.

Combining the 25% fall in the period up to 2012, with the 8% fall afterwards, Forestry Tasmania has thus negotiated a 33% fall in hardwood stumpage in real terms over the 30 year period from 2001 to 2031.

[17] Forestry Tasmania GBE Scrutiny Committee Hansard 25 July 2006
[18] Evan Rolley, CEO Forestry Tasmania, The Mercury 16 January 2001
[19] Wells G November 2007 Comments on the Forestry Tasmania / Gunns Limited Long Term Pulpwood Supply Agreement

3. The floor price is likely to apply at many times during the contract

Table 2.5 showed the stumpage rate that applies for various levels of world Pulp Price Indices. For pulp prices up to about US$530/t, the floor price mechanism applies. Even at pulp prices up to US$700/t, the stumpage rate is below $16.

Professor Wells' paper concludes that, as a result of the LTPSA, Forestry Tasmania's Return On Assets is likely to decline over time. While this level of government subsidy may appear very beneficial to Gunns, and clearly it is over the short term, it does raise a number of risks for the pulp mill, including:

- Ongoing concern and investigation by the National Competition Council. The NCC has raised significant concerns over the last few years about the pricing practices of Forestry Tasmania and has noted its low returns compared to the risk free rate[20]. The LTPSA is likely to exacerbate these concerns.
- The National Audit Office is taking an increasing interest in forestry in Tasmania. In 2008 it questioned the appropriateness of at least $13 million of federal government grants to Tasmanian forestry companies in the past two years[21]. Commonwealth Auditor-General Ian McPhee concluded in a report that proper process was short-circuited in the awarding of many of the $43 million grants made under the 2005 Tasmanian Community Forest Agreement.
- Community unrest regarding the level of subsidies to forestry and the low returns on state native forests. For example, a recent posting on Tasmaniantimes.com, an on-line media forum, regarding the level of government subsidies to the pulp mill, received the highest number of responses of any article to the site[22].

Should an investment in Mitubishi have been made on the assumption of on-going government subsidy to the Adelaide plant?

[20] NCC 2005 'Assessment of Governments' progress in implementing the National Competition Policy and related reforms'.
[21] The Mercury, Feb 2008
[22] www.tasmaniantimes.com 30 March 2008 Your Taxes at Work – Let's Add it Up

SECTION 5: COMPARISONS WITH ARACRUZ ARE FLAWED

Much of the earlier analysis of the mill compared it to Aracruz operations. For example, Macquarie Research[23] stated that:

'GNS has a number of similar attributes to Aracruz so it should be able to replicate the successful model. Key to this will be

- *A relatively cheap and close wood resource with a good mixture of plantation timber*
- *A new efficient mill of a reasonable size. The mill in itself will be low cost.*
- *A captive market in Asia for pulp'.*

But any comparison between Gunns and Aracruz is purely superficial. While both Gunns and Aracruz will own similar recently built pulp mills, Aracruz' scale, operating costs and returns are all light years ahead of Gunns. Consider the following table which summarises some differences between Gunns and Aracruz:

Table 5.1 Comparison of Gunns and Aracruz

	Aracruz	Comment	Gunns	Comment
Cost to build most recent mill	US$1,200/t	Guaiba	US$1,600/t	Bell Bay
Percentage of plantation fibre	100%	100% planted eucalyptus	20%	At start-up, forecast to grow to 80%
Owns wood resource	Yes	Self sufficient (Owns 566,000ha)	No	Less than 20% self sufficient
Wood close to mills	Yes	e.g. Veracel 45km	No	136km average
Production capacity-	3.2 million tonnes	Forecast 5.5 million by 2013	1.1 million tonnes	Forecast by 2010
Harvest rotation	7 years		13 years	More with drought
Average delivered cash cost	US$274	To N. Europe	AUD$400	Per Gunns Mar 2008. To China
Sales linked to long term contracts	80%		Not known	"Cornerstone" distribution agreements only
Investment Grade	Yes	S&P, Moodys, Fitch	No	
Reputation (governance and environmental)	Good	Member of Dow Jones Sustainability Index	Poor	2007 Corporate Governance Wooden Spoon (Ethical Investor Magazine)
Diversity in markets	Risk spread over many markets	Europe, America, Asia	Mainly relying on China	

[23] Macquarie Research 11 April 2007 Seeing the Forest Through the Trees