Why this paper?

The next Western Australian government faces a challenging environment, including the expectation of a low growth economy outside mining, significant pressure on government spending and a call for greater transparency in government. Cost savings are a current and future perspective of any government. The WA timber industry is one area that provides the opportunity for positive government benefit.

The WA timber industry, based on the current model, is likely to be at risk in the future and clearly has some short-term problems. The present and the future are tied together because of the long-term nature of the industry. The future for WA timber supply is in reality tenuous, as discussed later in this paper. To deny this is, on the basis of the evidence, foolhardy.

A root cause of the problems of the industry lies in the involvement of the WA Government in the market for timber. It will be shown through this paper that government involvement distorts the market and leads to gross inefficiencies in the growing and marketing of timber in WA.

From the perspective of timber supply the next government will need to determine whether a Government Trading Enterprise, currently the Forest Products Commission, has a sustainable economic rationale, or whether the current subsidized model will need to be completely rethought and redesigned with a better and more tenable approach to capital funding and risk/return.

1. A Case Study.

I have 12 acres of 15/18 year-old pine in a private plantation.

My recent experience in trying to 'thin' and sell some of this timber was very alarming. I found that because of the pricing policies and marketing practices of the Forest Products Commission (FPC) I was only able to sell my timber for a return of $20 per m3, after costs. I have calculated the IRR of this plantation to be 10% and the NPV at $788. This can be achieved only after stringent cost control and estimation. This is not a reasonable return on a long-term investment. My situation is replicated by many other private plantations in the South-West.

This outcome is a result of the presence of the Forest Productions Commission (FPC) in the market for timber.

Comparison of finished product per M^3 with my royalties for M^3 Pine saw logs.

Article of timber	Dimension priced	Retail per piece $ price (1)	Equiv. per M^3 $ price	Retail over royalty M^3 at $20	$Price less 50% waste/ costs and $99 for treatment	Net estimated retail mark-up over royalty M^3 at $20
Pine Structural	.09 x .035 x 3.0m	6.84	718.00	36 times	309.50	15 times
"	.09 x .045 x 3.0m	11.28	940.00	47 times	420.50	21 times
Pine sawn treated	.14 x .045 x 3.6m	33.66	1464.00	73 times	682.50	34 times
"	.09 x .045 x 3.6m	19.01	1302.00	65 times	601.50	30 times
Pine dressed premium	.285 x .019 x 2.4m	33.48	2575.00	128 times	1287.50	64 times

(1) Retail prices. Bunnings W. P., shelf prices September 2012.

2. The FPC – an impediment in the market?

FPC is the near monopoly supplier of pine and timber in WA, yet sells at a very low value, contrary to rational economic expectations. By doing so FPC is providing a floor price for timber that is uneconomic for them and anti-competitive to others. This is counter-intuitive and ultimately ensures market failure and government underwriting.

The consequences of FPC's participation in the market place, *inter alia*, are:

- FPC operates continually at a significant real financial loss and does not maximize its potential profit as it charged with achieving.
- The State has had to continually bail out FPC financially through cash injection and subsidies.
- FPC's pricing policies inhibit/preclude the development of a commercial agro/forestry industry based on private plantations and a fair-return for such investment.
- FPC's pricing policies are anti-competitive and privileged, to the advantage of a few major clients.
- The disparity between the wholesale price of timber and the retail price is unreasonable and worthy of investigation for price gouging.
- There is no evidence of market failure to justify the involvement of FPC.
- FPC is obliged to distort its financial and environmental position to ameliorate its true operational situation.
- FPC is not growing the potential forest industry of WA.
- FPC now exists to transfer the costs of the planting, growing, silviculture, management and harvesting of timber (pine and hardwood) from industry to the State purse
- FPC's activity in the native timber area embroils government in a volatile and ongoing politically damaging public debate about forestry and the environment.

3. Competition in the West Australian timber market and free and competitive markets.

For an industry to survive long term and operate on efficient and effective principles the marketplace need to provide a level playing field. Such is not the case for the plantation timber industry in Western Australia. A series of Acts of the Western Australian Parliament determine the prices and arrangements for the disposal of FPC's plantation timber. These are privileged agreements.

These privileged agreements are not quarantined from any 'market' and are the determinant of the stumpage prices of FPC and the 'market price' for all others sourcing FPC timber. *Ref FPC Stumpage prices Schedule 2.*

A reasonable return for effort.

All entities in the timber industry are entitled to plan for a reasonable rate of return on their investment. A reasonable rate of return should be reflected in investment criteria such as NPV and IRR amongst others.

Competition failure and market failure. A major rationale for government intervention in a market is to avoid market failure. There is no evidence of market failure in the plantation saw logs industry in Western Australia, other than that created by FPC pricing practices and government policy.

Neither is there a 'Community Service Obligation' argument: Such argument exists where a government trading enterprise is provided with a subsidy to ensure the costs of supply to consumers (often 100% of the population) are kept at a level below the cost of goods and services sold.

Pricing policies of the FPC are specifically aimed at benefiting select companies at the expense of the State. Consequently FPC marketing and pricing policy provides supply and product substitution benefits to other smaller timber processors, but not to plantation investors.

Australian context of timber supply.

The timber industry in Australia is dominated by a small number of major commercial players who exercise a substantial and controlling influence over timber policy, supply and pricing, both at a State and Federal level. Considerable effort is expended by these companies to control the image and policies of timber supply in Australia through:

- dominance of the nature and design and outcomes of research – generally confirmatory.
- management of the dissemination of information in the public arena.
- finessed lobbying influence at the bureaucratic and political party level.

These companies are significantly represented in industry organisations such as:

- Forest Stewardship Council (FSC) Australia,
- National Association of Forest Industries (NAFI)
- Forest and Wood Products Australia
- WA Minister for Forestry's Timber Plantation Advisory Group
- The Australian Plantation Products and Paper Industry Council
- and a number of others

Examples of the power and influence of these players is to be found in an evaluation of the RFA agreement and its one sided effectiveness; successful lobbying on carbon accounting details and classifying native forests as renewable, and in the number market-avoiding government timber supply Agreements that can be identified in most jurisdictions.

Demonstrably, through beneficial state Agreements, these players see conservation issues and 'real cost' supply of timber as inimical to their interests. Relative to the cost of supply these companies are reporting huge end-supply profits.

Some of these players are:

- Auspine
- Carter Holt Harvey
- Boral Timber
- Wesbeam
- Wespine
- Fletcher Building Group
- WA Chip & Pulp Co
- Whittakers Timber
- Koppers Wood Products
- Brickworks

All, or nearly all, the supply of timber to these and other timber processors derives from government plantation, or state forest.

The following extracts from the Dr. Ajani paper are given here as an objective assessment of the Australian context.

Extracts from the Introduction to:

Ajani. Dr Judith. Australia's ***Wood and Wood Products Industry: Situation and Outlook. Working Paper.*** Fenner School of Environment and Society. The Australian National University. February 2011.

> "P1. Plantations now supply 82% of the wood for solid wood products manufacturing (sawn timber and wood panels) in Australia.
>
> Production of native forest solid wood products has contracted by an average 2% p.a. over the past two decades.
>
> …. buyers have not shifted to hardwood-based imports,
>
> Instead, consumption of hardwood solid wood products, domestically produced and imported, contracted (Figure 10).
>
> Hardwood plantation chips are decimating native forest chip exports, the

single biggest market for native forest wood.

On current trends, we can expect a near complete displacement of Australian native forest chip exports within the next few years.

[It is a] false argument, that native forest logging is sawlog-driven … estimated that high appearance sawn timber, less vulnerable to the plantation competition, accounted for 3% of native forest wood production in 2009.

Australia's two million hectare softwood and hardwood plantation estate can immediately meet virtually all Australia's wood needs.

An incorrect interpretation of market failure has been used to support calls for government funding to do the job the private sector apparently is not interested in – investing in long lead-time plantations. Long lead times are not in themselves a market failure. Rather, investors in long rotation plantations require higher returns to compensate for the increased risk. Hardwood saw-millers, however, appear unwilling to pay the higher wood prices to attract the plantation investment and expect the public to keep subsidising their wood costs.

P2 Missed opportunities abound as the benefits of new industry players, products and technologies and biodiversity conservation/carbon store opportunities for native forests lie unrealised.

[opportunity for] government developing a coherent wood and wood products industry policy focused around plantation processing. Such a policy would completely free the market of state-subsidised native forest competition and stop unending plantation expansion via tax-based subsidies devoid of rigorous market analysis.

Native forest logging interests calling for approval to enter the vast energy and other biomass feedstock markets are the new wood-chippers.

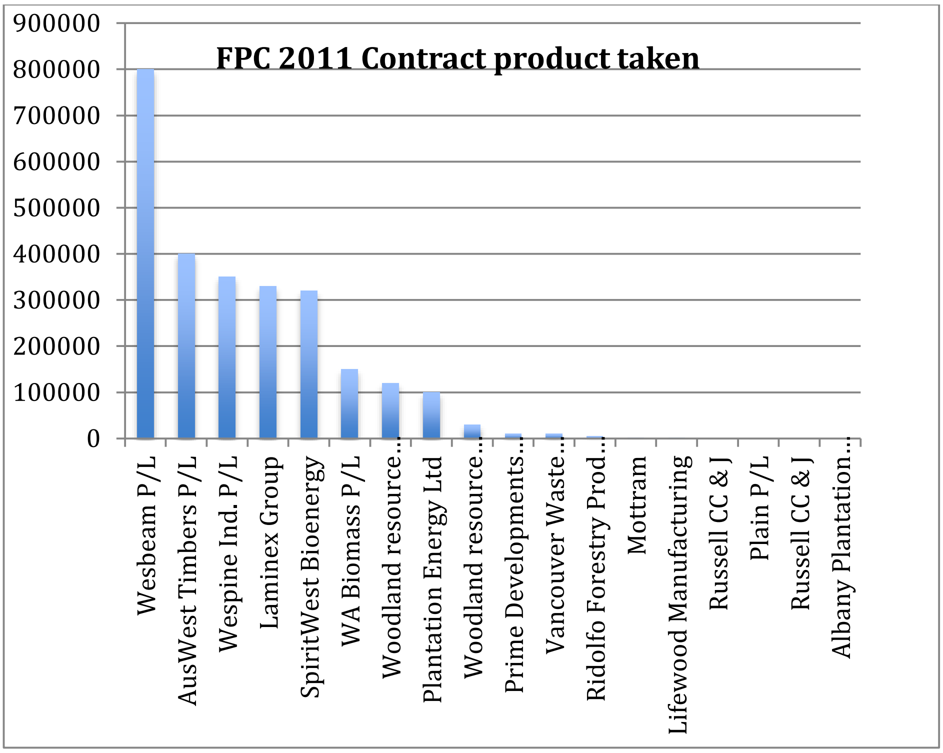
Their successful lobbying on carbon accounting details and classifying native forests as renewable and therefore eligible for renewable energy certificates works to propel these commercially marginal new opportunities for native forests across the profitability line.

Engineering commercial viability into wood based energy suits the native forest sector: but it is not an efficient energy production system.

Planting carbon sinks, especially with single or limited species, suits the plantation lobby: but such plantings are not efficient carbon stores.

If government facilitates native forests into the energy and other biomass feedstock markets, Australia's forest conflict will continue raging."

4. FPC client base and product interest. The bulk of FPC's timber production is provided to a few main players. FPC can be seen as a facilitator of these few clients.



Role of Agreements and customer base.

Government Agreements Acts relevant to the Forest Products Commission:

- The Wespine sawmill has operated since 1985. In 1991/92, Wespine signed an agreement with the Government of Western Australia to purchase sawlogs produced by State owned and private pine plantations, over a forty-year period. Under the agreement, the company committed to construct and operate a saw-mill which would make full use of the economies of scale provided by the deal, producing timber for sale throughout Australia and the countries of the Pacific Rim.
- Wood Processing (WESFI) Agreement Act 2000.
- Wood Processing (Wesbeam) Agreement Act 2002
- Dardanup Pine Log Sawmill Act 1992
- Silicon (Kemerton) Agreement Act 1987
- Bunbury Treefarm Project Agreement Act 1995
- Collie Hardwood Plantation Agreement Act 1995
- Tree Plantation Agreements Act 2003

These are the Agreements published on the FPC website and may not be all such agreements and arrangements.

Performance of agreements.

Are these agreements onerous?

Given the financial analysis of FPC's results and the future prospects for the organisation, the question needs to be asked. Under its current exceedingly long-term contractual obligations the FPC cannot perform reasonably, or be free from the exposure to high probability future risk.

> *Without new investment and the planting of additional land, the softwood estate will substantially reduce over the next 20 years. It is projected that the plantation estate will decline by 54 per cent by 2033. [Forest Products Commission]*

5. Government financial returns from FPC profits.

Despite the requirements of the FPC Act the profit and dividends returns to government have been abysmal.

The Act states:

> **FOREST PRODUCTS ACT 2000 - SECT 12.**
>
> 12 . Principles on which Commission is to act.
>
> The Commission in performing its functions must try to ensure that a profit that is consistent with the planned targets is made from the exploitation of forest products while ensuring —
>
> *inter alia*
>
> (e) that improved valuation, pricing and incentive mechanisms should be promoted.

Nevertheless the following table presents the profit performance of FPC over 11 years since its inception.

History of FPC Profits 2001 – 2011 $000			Cap. injections + Fed and State subsidies '000
	Before tax	After tax	
2001	-352	-2415	
2002	15468	13310	500
2003	20122	14500	1625
2004	8630	6038	1317
2005	-15115	-10177	4168
2006	33196	23435	1758
2007	-24923	-18505	13778
2008	3584	1008	2778
2009	529	561	19097
2010	-24156	-12041	2653
2011	-14179	-13788	3950
2012	?? 12900		87579
Cumulative profit	15704**		**139213***

*Excludes income from 'Peel'

**Net variation due to revaluations of 'natural assets'

The role of the Forest Products Commission – to transfer costs.

Looking at the conditions of the contract obligations of the FPC, together with its terrible financial performance it seems clear that this GTE exists solely **to transfer the costs** of timber plantation management **from industry to government.**

The 2012 results of the forest Products Commission are separately commented on as they deserve particular reference and evaluation. The evaluation is provided in the following.

6. Notes on 2012 FPC Annual Report results.

FPC has claimed a $12.9m operating profit in 2012. However little or no acknowledgement was given in the annual report of the $78m write-off of debt by the government that provided for that profit and other financial improvements recorded in that financial year.

Real returns to government.

> *…. the Commission is also pleased to advise that payments to State Government, in the form of taxes and dividends, increased by $6.8 million as compared to the last financial year with a total of $7.9 million paid during the year. [Forest Products Commission]*

Had the government not <u>bailed out FPC, to the tune of $83m in 2012</u> (*State contribution*. FPC Annual Report p.53) it would have recorded a very significant cash loss on its operations, again achieving a poor financial return on the assets that it holds in trust for the State of Western Australia. The above statement from the annual report only reflects a round-robin of payments funded by the State Government, and does not reflect any improvement in the underlying financial performance of FPC.

Performance and costs.

Unless there is **a community service obligation**, there cannot be a reasonable case for unfettered capital injection into a government enterprise. To do so is an admission of the FPC's financial failure. Yet FPC inclines to further capital injection for plantation. This despite a bail-out of $83m in 2012.

Clearly the FPC is a loss-making enterprise and taxpayers are bearing the burden of this management.

At the very best, and with huge goodwill, the FPC's performance can be considered to be break-even and actually it is much worse. The design, policy and practices of FPC are those of a "continually failing organisation" that was always destined to fail. This is a GTE that is a failed experiment and redundant to current and future needs as it cannot fulfill its mandated obligations, as shown in this paper and its own projections.

<u>For any political party to align itself with this FPC model is to invite cogent criticism and huge political cost, as the weaknesses are highlighted and become clearer and clearer to the public.</u> The WA timber industry with FPC at its heart is a mill-stone and a political time-bomb, for any political party adhering to current practice and policy.

7. Financial performance assessment FPC 2012.

The following is an analysis of the actual financial analysis of the Forest Products Commission (FPC), compared to the statements made in the 2012 Annual Report.

The analysis indicates that the operating performance of FPC did not improve year on year, it actually deteriorated, and significant changes in assumptions have been made on future yields/and or future pricing that has not been disclosed in either detail or the required level of transparency for a Government Trading Enterprise (GTE)

The commentary in italics is that sourced from the FPC Annual Report 2012.

> *The 2011-12 financial year has seen a positive return to the Commission, with a reported profit for the year of $12.9 million. The result is driven by improved production performance in the FPCs South West native forests and an increase in softwood chip exports. In addition, revenue from the sandalwood business continues to be sound with strong sales on both the domestic and international market.*
>
> *This coupled with a strong commitment to reduce discretionary spending has provided savings across employee benefits expenses, finance costs, accommodation costs and other expenses. [Forest Products Commission]*

The following is an abridged analysis of the financial results.

	Reported	Adjusted	
	2012		2011
Operating Sales	108,084		105,415
Non-Operating Revenue	8,221		6,379
Total Revenue	116,305		111,794
Cost of sales	64,055		60,154
Employee Benefits	17,932		20,682
Supplies and Services	20,400		18,414
Accommodation Expenses	3,765		1,267
Other expenses	42	2,151	1,943
Sub Total	106,194	108,345	102,460
Reported EBITDA	10,111		9,334
Operating EBITDA	1,890	-261	2,955
Operating EBITDA %	1.75%	-0.24%	2.80%
Operating Expenses/Revenue	98.3%	100.2%	97.2%
Finance Costs	1,864		6,058
Depreciation and Amortization	1,050		1,264
Profit before all other Changes	7,197		2,012

The commentary in the annual report seems to compare the 2012 performance against the Statement of Corporate intent (SCI), not the previous year's result, which technically allows FPC to report an improved performance, because the SCI was forecast to be worse than the 2011 budget.

However it is obvious after analysis that a number of favourable non-operating adjustments led to the improved result. If the fire insurance payout is treated as non-operating, and the reduction in interest due the State Government paying out all of FPC's debt is properly treated, then the result can be reviewed in its proper light. Also the other expense was reduced by $2.151M in 2012 due to the reversal of the doubtful debt provision that has nothing to do with the operating performance.

The actual operating EBITDA fell from $2.955M to $1.890M, with the operating EBITDA/Operating Sales margin falling from 2.80% to 1.75%. While sales revenue increased 2.53% ($105.4M to $108.1M) operating expenses increased 3.64% ($102.46M to $106.19M). If the favourable accounting treatment for doubtful debts is removed, then operating expenses would have increased 5.74%, more than double the increase in the revenue line. In that scenario the actual EBITDA/Operating Sales is negative -0.24%, hardly a stellar return.

The actual results are therefore **inconsistent** with the tone of the statements on cost containment, and the statements in total appear to be selective, taking the most favourable interpretation of the results. *[Comments of an experienced Chair of a variety of Audit Committees, including at least one major GTE].*

8. Asset base of pine plantations – The FPC has available 50,500 hectares set aside as pine plantation on State forest and timber reserves and a further 12,100 hectares on freehold land held in the name of the CALM Executive Body within the Departments Swan, South West and Warren regions

Biological Reporting – errors and omissions.

The largest errors of omission and lack of transparency arise in the reporting of the FPC's forest assets.

> *As part of its financial reporting requirement, the Commission is required to value its biological assets on an annual basis. This financial year has seen stabilisation in values between financial years despite value changes in timber volume, prices, production costs and discount rate. After accounting for annuity payments and impairment of plantations, the total movement of the biological assets was a $2.2 million decrease or a less than one per cent movement.*
>
> *Pricing arrangements are determined by a variety of factors including requirements under the Forest Products Act 2000. Section 59. prescribes the costs that are to be factored in to a price for forest products. More recently, contracts have been negotiated based on a 'fixed' price. This has presented a degree of financial risk to FPC although most contract prices include indexation or an alternate escalation mechanism. [Forest Products Commission]*
>
> ***Valuation of Biological Assets (FPC Accounting Policy)***
>
> *The fair value of the biological assets is calculated by estimating the future harvests after considering constraints imposed by sustainable management, contracts and markets. Next, in valuing each group of asset, revenue from the harvest of forest products, costs associated with the management, marketing and selling of the forest products are assessed to determine the value of the asset.*
>
> *Finally, by applying a discount rate, the net present value of those cash flows is assessed. The net present value (NPV) is the amount that one would pay today to receive the future cash flows from the harvest of forest products and management of the asset till harvest. NPV is calculated as the net of the future cash inflows and outflows associated with forest production activities, discounted back to current values at the specified real pre-tax Weighted Average Cost of Capital (WACC). The WACC is assessed by the Western Australian Treasury Corporation (WATC) at each financial year end.*
>
> *In determining the valuation of the assets, there are assumptions that must be reviewed annually. Valuation changes mainly arise from:*
>
> - *changes in timber volume changes in timber prices*
> - *changes in production costs, including management, marketing and selling costs changes in the WACC rate*
>
> *[Forest Products Commission]*

However, in the Notes to the Accounts the following is divulged;

Notes 27.1 Discount rates

The following discount rates have been applied in the calculation of net market values:

	2012	*2011*
30 year discount rate	*10.00%*	*12.20%*
50 year discount rate	*10.60%*	*12.40%*

The discount rate, which is real and pre-tax, is based on the Commission's weighted average cost of capital (WACC). The WA Treasury Corporation provided an update of the Commission's WACC as at 30 June 2012. [Forest Products Commission]

While the FPC does not provide a weighting between the 30 and 50 year rate, based on the sensitivity analysis shown for the 2011 result, a reduction in the discount factor of this magnitude should produce a significant increase in the reported values of the biological assets.

Notes 27.2 Sensitivity analysis

The value of Biological assets is dependent on assumptions underpinning the Commission's growth models and cash flow assumptions. Discount rates have been adjusted to take account of significant risk factors not adjusted directly through the rough cash flows.

The following sensitivity analysis has been provided to assist in the assessment of the impact of variances in these assumptions.

	2012	*2011*
Discount rate: + 300 bpts Total Biological assets at valuation	*(59,447)*	*(52,382)*
> - 300 bpts Total Biological assets at valuation	*92,082*	*78,400*
Future Prices +3% Total Biological assets at valuation	*23,438*	*11,367*
Future Prices -3% Total Biological assets at valuation	*(23,438)*	*(11,301)*

[Forest Products Commission]

The following is my assessment of what would have been the effect of just the change in discount factors.

Forest assets - opening value	329,277
200 point reduction based on 2011	52,000
Adjusted value	381,277
% Change	15.8%

Closing value	333,065
Less capitalization	6,008
Adjusted value	327,057
Movement due to impairment/fair value	54,220
% Change beginning value	16.5%

Effectively before adding in capitalisation of new investments and accounting for the reduction in the valuation, either due to lower expected forestry yields or prices, the forest assets should have had a value in excess of $380m.

As the FPC shows a 2012 adjusted value in the accounts of $327,057m, then using my calculations (acknowledging that you can only be 100% accurate by having access to the financial model) the asset has been reduced $54.22M (16.5%) which under the accounting policy and notes can only be due to expectation on future prices and or yields.

While these should be important matters for an informed reader of the annual report, there has been no disclosure by the FPC.

In correspondence with the WA Auditor General on the subject of the valuations and their accounting applications, he states:

> *The valuation of forests … a challenge for the accounting profession ….2003 agencies with native forest harvesting rights were required to annually review the fair value of these assets, with increases or decreases in fair value being included in revenue or expenses. This directly impacts the profit or loss for the particular year [emph. added]. … The estimation involves the making of several challenging assumptions.*
>
> *Although Australian Accounting Standards require movements in the fair value of SGARAs to be included in profit, it is generally accepted that the standards provide for sufficient disclosure to enable users of the financial statements to determine the "underlying" financial result, net of this effect.[emph. added] OAG WA Feb 2013.*

This clearly has not been the practice of the FPC in its annual reports.

Problems with assets and risks to future supply.

One key aspect that comes out of the notes is that FPC has insufficient resources to meet future contractual commitments.

> ***Notes 37.2 Guarantees and undertakings***
>
> *a) The Commission has identified a potential shortfall of current pine resources that would be available to meet future contracted supply*

commitments. As at the date of the financial statements, there is a high degree of uncertainty regarding the likelihood, timing and amount of any potential shortfall and the Commission is therefore unable to determine a reliable estimate of the amount of any potential obligation that may arise in the future.

The Commission is undertaking further feasibility studies and inventory analysis in order to develop and implement mitigation strategies if necessary and will continue to monitor the need for further disclosure, or a provision, at future reporting dates.

Without new investment and the planting of additional Land, the softwood estate will substantially reduce over the next 20 years. It is projected that the plantation estate will decline by 54 per cent by 2033. This is a result of not replanting the northern forest region after harvesting, in accordance with the Gnangara Sustainability Strategy; 5,000 hectares of share farm Leases expiring over the next ten years; and new developments, easements and changes in Land tenure which continue to encroach into the plantation estate. [Forest Products Commission]

One of the two outcome objectives of FPC under the Forest Products Act (2000) is:

The long-term viability of the forest products industry.

It is the contention of the writer that FPC is not operating in a manner consistent with that objective.

As the major price setter in the forest products food chain, it is using its dominant market position to set prices at artificially low rates. This has the effect of allowing downstream industries such as timber processing to operate (noting that processors are still not meeting their long-term state agreements) to survive and create products for end users that allow those participants to make a profit, but not the grower of the product.

The price increase from farm-gate saw logs to the retailer is calculated at some 36x for basic product and 64x for finished product. Somewhere along this chain one, or more than one, of the participants are making viable, if not excessive, margins, yet FPC (when the true financial performance is exposed) is making no profits, and the prices set by it continue to lock in returns that boards and shareholders of public companies would find to be totally unreasonable. Unfortunately its pricing decisions, and the lack of accountability for its commercial performance, leads directly to a pricing regime where it is neither economic for private operators to harvest existing stands and uneconomic for new investment.

In this scenario, the FPC will never be able to meet its supply commitments and the harvesting of native forests will be the only alternative.

9. Woodchip markets – collapse.

Markets for residue products, such as export log and woodchips are constantly being developed to enable the FPC to maintain its thinnings program. These sales are often made on a short-term basis in a dynamic world market.

These markets are particularly important for recovery products from plantations north of Perth that have been badly affected by dry seasonal conditions in recent times. [Forest Products Commission]

Despite this the following extract from Elders Forestry tells a different story.

"Elders Forestry Woodchip Market Update June 2012.
Trading conditions in Elders Forestry's key woodchip markets continue to deteriorate. Following an extensive market review undertaken by Elders Forestry, demand for Australian woodchip is not expected to start to improve until after 2016.

Deteriorating trading conditions in key woodchip markets.
Two unprecedented events have occurred in the past 12 months that have significantly impacted trading conditions in Elders Forestry's key woodchip markets:

The Global Financial Crisis
The Japanese earthquake and subsequent tsunami.

In line with these events, a decline in the amount of paper being consumed and manufactured has occurred. As a result demand for woodchip has declined.

In 2008, following the Global Financial Crisis, Japanese demand for woodchip stood at 12.1 million BDMT per annum. In 2009, demand stood at 9.1 million BDMT per annum. Current research has forecast that this downward trend will continue into the future.
Distressed asset sales and Australian woodchip surplus
The introduction of the 2020 Vision and the rise of managed investment schemes in 1997 lead to the rapid expansion of plantation forestry in Australia.
Funded primarily by managed investment schemes, 794,000 plantation hectares were established between 1998 and 2010.

Following the collapse of Willmot Forests, Great Southern Plantations and Timbercorp a number of distressed assets have been made available for sale, which has resulted, today, in the creation of a significant woodchip stock surplus within Australia.

Collapse in the price of woodchip.
The competitiveness of Australian woodchip exports has been affected by the strong Australian dollar. The price of Australian woodchip is now internationally uncompetitive. Increasing levels of woodchip are being purchased from countries where the low cost of plantation establishment, management and harvesting are reflected in woodchip price - Vietnam, Thailand and Chile.

Current research has indicated that a woodchip price of A$207.40 per BDMT can no longer be sustained.

Summary
The combination of deteriorating trading conditions, a woodchip surplus and price collapse has meant that harvesting of many project plantations has been delayed or has ceased and will not recommence until a significant improvement in the current wood-fibre market occurs.
Elders Forestry is currently investigating alternate strategies to provide growers with certainty in relation to investment returns in the short to medium term.
[Elders Forestry]

Further indications of the precarious nature of the woodchip industry are indicated by the collapse of the export chip industry illustrated by the winding up of RuralAus plantations. *WA Business News 10 Dec 2012*

<u>If FPC can claim to continue to survive within this collapsed market then the economic viability of this aspect of the FPC activity must be viewed with extreme skepticism or the FPC is indirectly subsidising woodchip exports.</u>

10. Climate change and assets.

Is the true risk being fully accounted for?

The plantation estate has been significantly impacted by exceptional dry seasons. The FPC continued to monitor climatic conditions throughout 2012 with surveys conducted in January and May. Although the dry seasonal impacts appear to have stabilised, there is a risk of further tree deaths if below average rainfall continues for long periods into the future. Silviculture regimes, including planting densities and species selections, are being reviewed to mitigate any future impact of extended dry periods. FPC

One of the major issues affecting the FPC is the extreme, record low, dry seasonal conditions during the years from 2008 to 2010 which are having a significant impact on the mature plantation estate. The FPC is working with other agencies to gain an understanding of the impacts and develop appropriate mitigation strategies, including maximising the value of the affected resource and developing additional markets. [Forest Products Commission]

A recent ABARES study indicates that the reduced rainfall and increased temperatures projected to occur by 2030 and 2050 due to climate change would affect the growth rates of both forest plantation species and native forest species, although such effects would vary both by species and across the study region. On average across the whole region, growth rates for radiata pine, blue gum and native forest are projected to decline against the 2005 baseline growth rates, while the growth rate of maritime pine may increase slightly. These results correspond to the relative sensitivity of each species to changes in temperature and, to a lesser extent, rainfall. [ABARES 2011, *Potential effects of climate change on forests and forestry: summary for south-western Western Australia*, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, August. P7.]

Projected changes in log supply due to median climate change effects on forest growth, South West W.A. study design area ('000 m^3 per year).

	Baseline			Scenario A		Scenario B	
	2010	2030	2050	2030	2050	2030	2050
Total log supply	4097	6112	6183	5145	4646	5165	4790
Reduction				16%	25%	15%	23%

FPC performance projections.

FPC's projections on supply are at least open to debate and must not be relied upon for future supply calculations without further rigorous investigation and validation. These estimations have significant forward economic implications for the State and timber supply. Extreme caution needs to be applied in forward projections which must be truly objective and cognizant of all risks, including environmental.

DEC in 2013 has stated clearly that,

> *Western Australia is one of the most vulnerable regions to climate change in the developed world. The State is already experiencing climate change impacts - and further substantial impacts are inevitable.[Ref DEC website]*

further DEC advises

> *Between 1950 and 2011, rainfall in south-west Western Australia has decreased significantly, with the largest decrease in the Bunbury to Walpole region, where it has fallen by up to 50 millimetres each decade.*

Significantly, in its plans for climate change action, DEC says nothing about protection of forests, or any change in forestry practice, but relies on 'technical innovation for resilience' and 'education'. This may reasonably be considered as 'blue sky' speculation and a perpetuation of the status quo in the face of adversity. The reported stress of south-west forests and state plantations indicates a policy and practice failure in this area.

11. Sale of assets experience and value, barriers.

The annual report for 2012 indicates a failed attempt to dispose of certain uneconomic assets held by FPC.

> *The plantation sharefarm estate comprises 42,600 hectares of mixed species, of which 18,000 hectares has been previously identified for divestment. Following two unsuccessful tender processes the FPC will continue to manage and maintain these plantations in conjunction with landowners. [Forest Products Commission]*

Nevertheless, pension funds are increasingly attracted to forestry investments because of their low correlation with equity and bond markets and because the inflation hedge they offer, according to fund managers and investors. [Ref. *Forestry ticks a number of big boxes for pension fund investments* Australian Forests and Timber News. July 2012 P4.]

> *Forestry investments are correlated with inflation, providing a hedge for inflation-averse long-term investors such as pension funds…."it is not an asset you can buy and sell at the touch of a computer button … but you can sell forestry, if it's in developed markets." …. investors are also concerned about the valuation of forestry assets and … there can be some subjectivity in valuing….*

12. Current rationale and context.

Neither is the FPC in a position to grow the timber industry. The suggestions of new industry initiatives can only be achieved, as the past evidence shows, based on substantial government subsidies to new players and further distortion of the market for timber products. Trumpeted initiatives may be simply chimeras and speculative dreams.

> *In late 2011 the FPC invited Expressions of Interest (EOI) seeking companies that have an interest in the local processing of low grade native timber from the States South West regrowth native forests. Several companies submitted responses and have now been requested to prepare and submit Business Plans by late 2012. Future resource commitments will depend on the volume, grade and location of resource being made available in the next Forest Management Plan 2014–2023. [Forest Products Commission]*

<u>There is no real evidence of stand-alone and independent industry growth during the FPC era.</u> Further, the growth that has come has caused political, environmental and social dysfunction, while failing to provide equitable improvements in the security and socio/economic welfare of the work force of the timber industry.

Industry employment is fractured, tenuous, often temporary or casual, and amongst the lowest paid in the WA workforce. The industry survives more on its culture than economic reality. This 'culture' is blatantly encouraged and promoted by bigger industry players and policy beneficiaries with vested interests in the *status quo*. This position ignores reality.

> *The reduction in the potential increased employment observed in the baseline case is estimated to be between 14 and 15 per cent at 2030, increasing to between 20 and 22 per cent at 2050. [ABARES 2011, Potential effects of climate change on forests and forestry: summary for south-western Western Australia, Australian Bureau of Agricultural and Resource Economics and Sciences, Canberra, August].*

There is ABARES evidence that in 2010 only 1123 (full and part-time) of the jobs in the WA forest industries were in wood harvesting, log haulage and primary wood production. Others, in management, support and secondary processing, … "are not necessarily dependent on timber from within the study region."

Comparison between the characteristics of in the forest and forestry industries,study region and Australian average, 2006.

Statistical local Area 1	Workers aged 50 years or older	Workers without post secondary school qualification	Workers earning < $400/week	Workers in unskilled occupations
Nannup	27.0	81.0	19.0	57.1
Manjimup	30.3	66.3	6.8	43.9
Greenbushes	24.1	68.4	15.0	40.6
Dardanup	30.5	62.7	5.1	20.3
Donnybrook-Balingup	35.1	58.5	12.8	26.6
Boyup Brook	16.7	66.7	0.0	38.9
Dardanup	16.8	59.4	9.9	9.9
Collie	10.2	69.3	13.6	52.3
Capel	21.1	45.6	10.5	22.8
Albany	13.5	58.9	12.1	25.5
Australia	24.3	53.6	11.6	18.5

13. Desired outcomes of this report.

The adoption of a new model for the timber industry in WA that will in part:

- Remove the FPC, at least from the role of 'timber supplier' and determiner of market prices.
- Cause industry to carry the full cost of timber supply in a free and competitive market.
- Stimulate and provide the opportunity for growth of the industry through independent plantation and supply, on real competitive market principles. (This excludes government).
- Remove the need for large-scale State-forest/land logging in favour of private plantation harvesting.
- Provide for a better distribution of wealth within the timber industry to improve economic opportunity and social welfare.