

The Directors  
AgriWealth Capital Ltd  
20 Young Street  
Neutral Bay, NSW 2089

**Date: 03 February, 2010**

Ref. 51A12602

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Dear Sirs,

## **INDEPENDENT MARKET REPORT FOR SOFTWOOD PLANTATION PRODUCTS**

This Independent Market Report has been prepared by Poyry Forest Industry Pty Ltd (“Pöyry”) for AgriWealth Capital Limited (the “Project Manager”) for inclusion in the Information Memorandum (IM) for the AgriWealth 2010 Timber Project (“the Project”). Its purpose is to assist investors in assessing the price outlook for the softwood plantation products likely to arise from the Project. Pöyry is independent of the Project Manager and has no financial interest in the Project other than a professional fee for this report.

### **EXECUTIVE SUMMARY**

Growers in the Project will produce radiata pine logs in the key plantation growing and timber processing regions of Tumut/Tumbarumba and Oberon in New South Wales (NSW). Major product types are sawlogs used primarily to produce sawn timber for construction, veneer logs used in making plywood panel and engineered structural timber products, and pulpwood for use in the production of pulp for paper and packaging products and reconstituted wood panels (e.g. particleboard).

There is high demand for sawlogs and pulpwood in the Tumut/Tumbarumba region (known as the Murray Valley wood supply region or the Hume region). Similarly, there is high demand for both sawlogs and pulpwood in the Bathurst/Oberon region (also known as the Central Tablelands wood supply region or Macquarie region). Export of the Project’s radiata logs is unlikely, given the haulage distance to port, the strong regional demand for logs and the domestic demand for sawn timber. However, with the advent of containerised export shipments of sawlogs via railside facilities, the presence of such facilities in the Hume and Macquarie regions, and the predicted increasing world demand for softwood sawlogs generally, the possibility of exports of the Project’s radiata logs under favourable circumstances cannot be discounted entirely.

The domestic outlook for softwood<sup>1</sup> sawn timber is driven by construction activity and is assessed as steady in the medium to long term. There are large, modern sawmills in the Hume and Macquarie regions that can be expected to seek to maintain throughput in order to minimise production costs. Sawmills in these regions are able to cost-effectively supply the large domestic markets of Sydney and Melbourne.

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<sup>1</sup> The term ‘softwood’ here refers to wood from coniferous tree species, but in the Australian domestic context mainly refers to *Pinus radiata* (radiata pine) in southern NSW, Victoria, South Australia and Tasmania, *Pinus elliottii* or *Pinus taeda* or F1 or F2 hybrids (southern pines) in Queensland and northern NSW, or *Pinus pinaster* (maritime pine) in Western Australia.

Planned pulp mill expansions are currently underway in the Hume region, and there is scope for import substitution in some paper product sectors. Therefore, the demand in the Hume region for radiata pulpwood is expected to increase in the short to medium term, remaining at least steady thereafter.

The Australian forest products industry is predominantly characterised by long term log supply contracts (up to 20 years). As a result, details of individual log sales transactions are not publicly available, making it difficult to identify market log prices. Table ES- 1 below details the national average softwood stumpage prices reported in the Australian Pine Log Price Index<sup>2</sup> (APLPI). Stumpage prices (the delivered prices less the costs of harvesting, loading and transport to the mill or port gate) are given by log grade (as defined by wood quality and diameter).

**Table ES- 1:**  
**Average weighted softwood sawlog stumpage prices reported by the APLPI (July-December 2008)**

Log Grade	Description	Weighted Average Log Price (AUD/m <sup>3</sup> )
Small sawlogs	< 24.0 cm SEDUB <sup>3</sup>	35.20
Intermediate sawlogs	23.9 to 32.0 cm SEDUB	48.59
Medium sawlogs	31.9 to 44.0 cm SEDUB	68.84
Large sawlogs	> 43.9 cm SEDUB	83.54
Preservation	All logs sold to domestic timber treatment plants including rails, poles and posts.	23.78
Pulpwood logs	All logs sold to domestic manufacturers of pulp and paper, woodchip/flake-based panels and other such products, including logs processed for export woodchip.	11.76
Salvage logs	All logs excluded from the above products on the basis of price and wood quality.	28.34

Source: KPMG 2008

<sup>2</sup> KPMG publishes the Australian Pine Log Price Index every 6 months. Refer [KPMG > Industries > Energy & Natural Resources > Forestry](#).

<sup>3</sup> Small End Diameter Under-bark.

## **1 INTRODUCTION**

This Independent Market Report has been prepared by Pöyry for inclusion in the AgriWealth 2010 Timber Project Information Memorandum (IM). Its purpose is to assist investors in assessing the price outlook for the softwood plantation products likely to arise from the Project.

Pöyry is part of the Pöyry Group, which provides energy, forestry, infrastructure and environmental services to clients within Australia and around the world. The group operates a global network of 7,500 experts in 49 countries.

Pöyry and its predecessor companies have over 30 years of experience in the Australian forestry sector, and provides professional services to the forest sector through a team of highly experienced consultants. The company offers multidisciplinary services across all components of the forest product chain including advice on forest establishment, tending, monitoring, harvesting, markets and utilisation.

Pöyry's contribution to the IM has been confined to the preparation of this Independent Market Report, the Independent Forester's Report and the Harvest, Haulage and Roding Cost Benchmarking Report.

Actual sale prices at the time the Project plantations are harvested may be significantly above or below the current prices given in this report. The opinions expressed are within the context of the forest industry which has similar inherent risks as other forms of land based primary production, and a long investment period. These risks may be material to the expected outcomes.

Pöyry notes that AgriWealth is responsible for sales of the plantation timber.

## 2 OVERVIEW OF THE AUSTRALIAN SOFTWOOD PLANTATION SECTOR

### 2.1 Plantation Establishment

As at 2008, Australia has around 1.97 million ha of plantation forests<sup>4</sup>. Softwood plantations accounted for more than half the national estate (1.01 million ha or 52%)<sup>4</sup>, with hardwood plantations accounting for the remaining area. Softwood plantations are mainly *Pinus* species, of which approximately 75% is *Pinus radiata* (radiata pine).

Government investment through the Commonwealth Softwood Agreements led to the rapid expansion of the softwood plantation area between 1950 and 1980. The softwood plantation industry is now in a mature phase of development, with the area of new land being established in softwood plantations approximately balancing the area of existing softwood plantations moving to other land uses after harvest. Almost all of the softwood plantations are managed to produce both sawlogs (used to produce sawn timber) and pulpwood (used to produce pulp which is processed further into paper products and panel products).

In contrast, most of the hardwood plantations have been established during the last 15 years, on short rotations, to produce pulpwood only. Most of the plantations are eucalyptus species, and are currently almost entirely exported as woodchips.

Plantation ownership is becoming more diverse, and includes managed investment scheme (MIS) investors, farm foresters, other private owners, superannuation funds, and timber industry companies. However, with the exception of Victoria and Tasmania, where the softwood resources have been privatised, and the Northern Territory, governments are still the major owners of softwood plantations. Timberland Investment Management Organisations (TIMOs) own more than 360 000 ha of softwood plantations in NSW, Victoria and Tasmania.

Figure 2-1 shows that by state, NSW has the largest percentage of softwood plantations at approximately 27%, followed by Victoria (22%) and Queensland (19%)<sup>4</sup>.

Over 28.5 million m<sup>3</sup> of logs were harvested in 2007/08, of which 52% were from softwood plantations (Figure 2-2)<sup>5</sup>. The volume of softwood harvested from plantations has increased at an average rate of 4.4%/a, from approximately 7.9 million m<sup>3</sup> in 1992/93 to 14.9 million m<sup>3</sup> in 2007/08. It is expected to stabilise around current levels. Comparatively, volumes harvested from native forest between 1992/93 and 2007/08 have averaged around 9.8 million m<sup>3</sup>/a, of which 3.7 million m<sup>3</sup>/a in 2007/08 were hardwood sawlogs. The annual growth rate since 1992/93 has been -0.6%/a.

The plantation softwood sawlog volume was approximately 9.5 million m<sup>3</sup> in 2007/08, and accounted for approximately 75% of the total sawlogs harvested that year. Pulpwood harvested from softwood plantations in 2007/08 was approximately

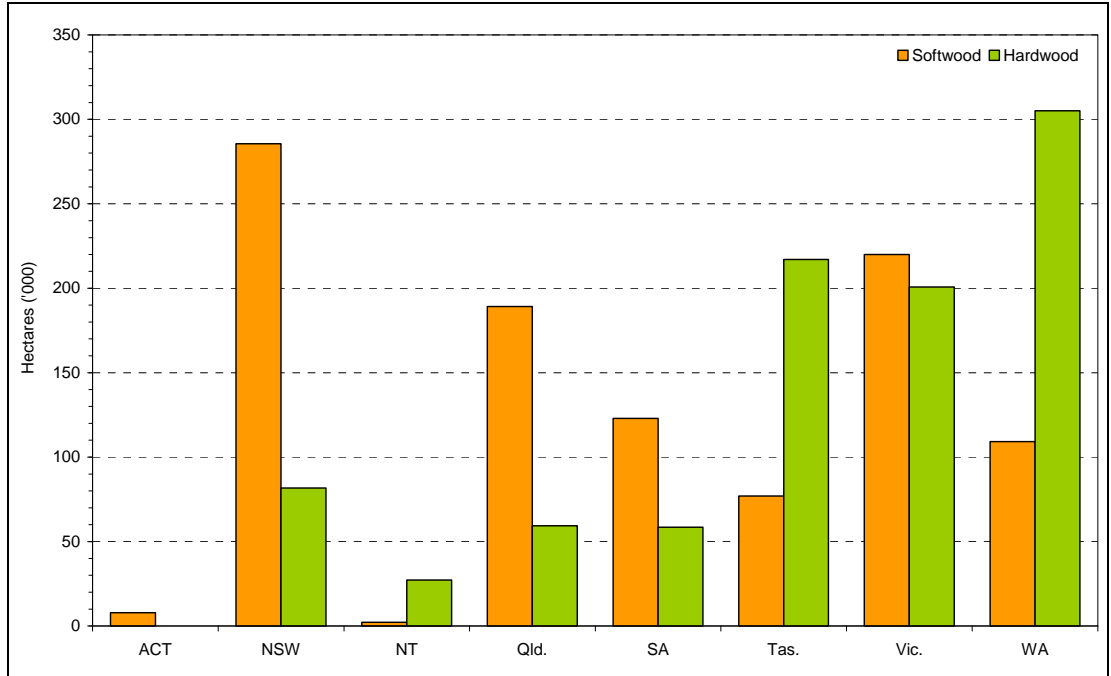
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<sup>4</sup> Gavran, M. & Parsons, M. (2009) *National Plantation Inventory 2009 Update*, National Forest Inventory, Bureau of Rural Sciences, Canberra.

<sup>5</sup> ABARE (2009) *Australian Forest and Wood Products Statistics*, September and December Quarters 2008, Canberra, May.

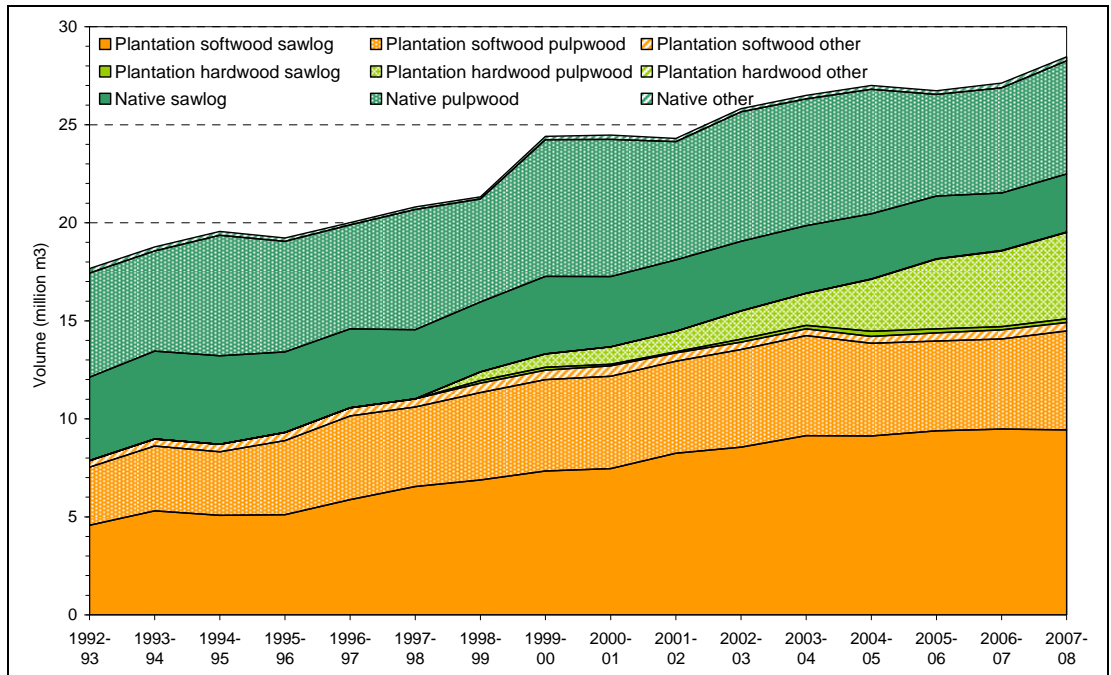
5.1 million m<sup>3</sup>. Other softwood log product types accounted for approximately 427 000 m<sup>3</sup>.

**Figure 2-1:**  
Australia's plantation area by state, 2008



Source: BRS 2009, Pöyry

**Figure 2-2:**  
Australia's harvest volumes, 1993-2007



Source: ABARE 2008, Pöyry

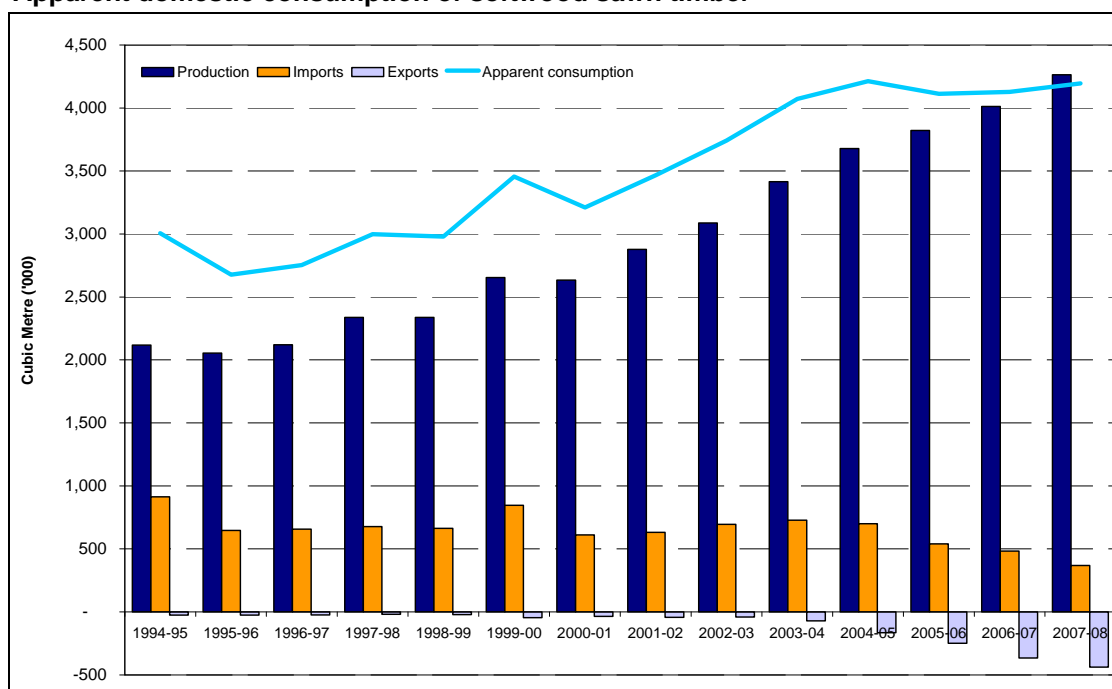
## 2.2 Domestic Softwood Consumption

Softwood plantation sawlogs are mainly used to make structural grade sawn timber for building and construction. In some regions, larger diameter straighter sawlogs (pruned or unpruned) can be peeled or sliced for veneers to make plywood. Pulpwood logs are smaller and/or less straight logs that are chipped and processed into wood-based panels or pulp for a wide range of paper products. In some regions, there are preservation markets where generally smaller diameter straight logs are processed into posts and other landscaping products.

### 2.2.1 Softwood Sawn Timber Consumption

The volume of softwood sawn timber produced in Australia has increased significantly, as has consumption (see Figure 2-3). Since 1987/88 production has grown from approximately 1.44 million m<sup>3</sup> to 3.93 million m<sup>3</sup> in 2007/08, at an average rate of 6.8%/a over the last 10 years. This increase is mainly due to softwood plantations established in the 1960s reaching maturity and the corresponding increase in production capacity to absorb the additional volume available. Apparent domestic consumption of softwood sawn timber has mirrored this trend, increasing over the last 10 years at an average rate of 4.5%/a.

**Figure 2-3:**  
Apparent domestic consumption of softwood sawn timber



Source: ABARE 1995- 2008, Pöyry.

Although softwood sawn timber imports have been reasonably steady since 1995, they have declined considerably as a percentage of apparent consumption. In 1995, imports amounted to 30% of apparent consumption. The average imports over the last 5 years (564 000 m<sup>3</sup>) have amounted to approximately 13%.

Imports are limited by their distance to markets. However, softwood sawn timber imports are possible when exchange rate conditions make trade favourable, when

supply countries have excess supply or when the product has a characteristic which is limited in Australian supply.

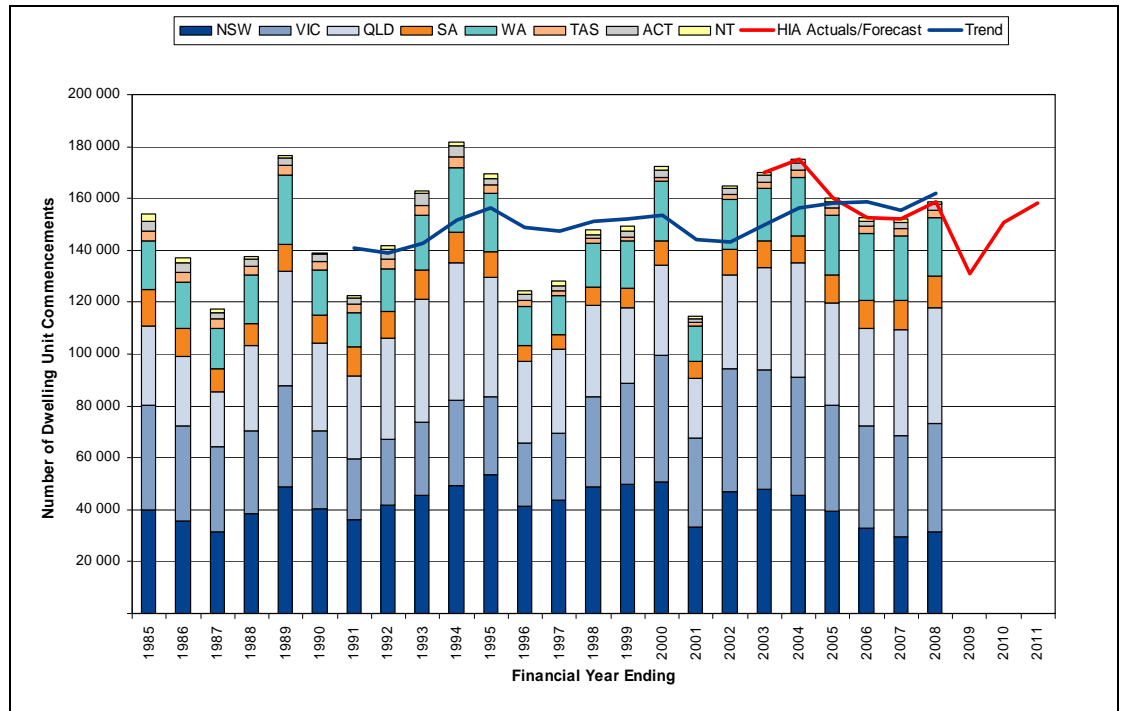
The New Zealand forest industry views Australia as a potential growth market for its competitively priced softwood sawn timber. New Zealand's available supply of Radiata pine sawlogs will increase significantly over the next 10 years, stabilising or possibly declining slightly thereafter. However, the characteristics of the New Zealand grown softwood timber are somewhat different, making it better suited for non-structural uses. As a result, structural sawn timber produced in Australia is likely to remain competitive, particularly in the nearby Melbourne, Sydney and Brisbane markets.

Softwood sawn timber exports have traditionally been low, as Australia has used the majority of production domestically. While sawn timber exports in 2007/08 were only 10% of production, they have grown over the last 10 years, from 18 000 m<sup>3</sup> in 1997/98 to 438 000 m<sup>3</sup> in 2007/08. Over the same period, exports of softwood roundwood logs have also increased. Both trends reflect the development of overseas markets complimenting the traditional domestic markets. With the softwood plantations in a mature phase of development, the annual sawlog harvest is expected to stabilise at around 10 million m<sup>3</sup>, with exports remaining relatively constant.

### **Softwood Sawn Timber Market**

The major use for softwood sawn timber in Australia is in house construction, alterations and additions. Consequently, softwood sawn timber demand is closely correlated with construction activity such as dwelling commencements and dwelling approvals. Figure 2-4 below illustrates the cyclical nature of the construction industry. Currently, the Australian building industry is at a low point in the cycle due to the prevailing global economic slowdown. However, Australia continues to face a widening gap between demand for and supply of housing, and housing stock numbers remain low. Pöyry therefore expects to see an increase in new dwelling unit commencements in the medium term and therefore an increase in demand for structural softwood sawn timber.

**Figure 2-4:**  
**Australian dwelling unit commencements (houses and units) seasonally adjusted**



Source: ABS 2008, HIA 2009, Pöyry

The growth in domestic softwood sawn timber consumption has largely been at the expense of the domestic hardwood sawn timber market. Major softwood timber processors with modern mills are able to produce sawn timber more cost efficiently in a market where supplies of roundwood from native forests is declining. As a result, higher value and lower volume end-uses are sought for hardwood timbers milled from native sawlogs.

The major softwood timber sawmills in Australia (defined as having an annual intake capacity in excess of 150,000 m<sup>3</sup>) are shown in Table 2-1 below.

**Table 2-1:  
Major Australian sawmills (with annual intake capacity in excess of 150 000 m<sup>3</sup>)**

Company	State	Wood Supply Region	Location	Intake Capacity (m <sup>3</sup> /a)
Allied Timber Products (ATP)	NSW	Central Tablelands	Bathurst	200 000
Associated Kiln Driers (AKD)	VIC	Central Victoria	Colac	260 000
Carter Holt Harvey (CHH)	QLD	South East Queensland	Caboolture	320 000
	NSW	Murray Valley	Tumut	600 000
	SA	Green Triangle	Mt Gambier	540 000
				385 000
	VIC	Central Gippsland	Morwell	420 000
Murray Valley		Myrtleford	255 000	
FEA Timber	TAS	Tasmania	Bell Bay	300 000
Gunns (Auspine)			Scottsdale	240 000
	SA	Green Triangle	Tarpeena	600 000
Highland Pine Products (HPP)	NSW	Central Tablelands	Oberon	725 000
		Murray Valley	Tumbarumba	850 000
Hyne & Son Pty Limited	QLD	South East Queensland	Tuan	600 000
			Imbil	250 000
Wespine Industries	WA	Western Australia	Dardanup	400 000
Willmott Timbers (TASCO)*	NSW	South East NSW	Bombala	270 000

Source: Pöyry

\*A redeveloped timber processing facility operating under a 50:50 joint venture between Willmott Timbers and Dongwha. The facility is expected to be at full production from 2011.

Carter Holt Harvey (CHH) is the largest sawmilling company in Australia, supplying approximately 34% of the market. Hyne & Son has the next largest market share, at 16%. Imported timber makes up approximately 13% of the domestic softwood sawnwood market. In addition, approximately 58 smaller scale softwood sawmills operate in Australia.

The key demand drivers are expected to support continued demand growth in the medium to long term. Renovations, alterations and additions, non-residential building and engineering construction are, to some extent, complementing the growth in new house starts. Continued population growth, boosted by higher immigration, a long-term trend of declining household size, and continued government support to first home buyers all lend support to stable housing demand over the long term.

Given the limited suitability of land for economic plantation development, and the certainty of what is available for harvest in the next 20 years, given the softwood rotation length, there is little doubt that if the softwood sawn timber market continues to grow at the modest historical rate, post-global financial crisis, a widening gap will develop between domestic supply and demand.

The introduction of the first stage of Russian roundwood log export tariffs has driven some increase in prices for softwood sawlogs in Europe and Asia, and it is expected that the Australian softwood sawn timber market will be further protected from imports in the short to medium term as a result of these tariffs. The market reaction to the announced tariff introduction was predictable. However, the postponement of the

planned second stage increase in tariffs has cast some doubt on whether this will now eventuate. Any further increase is expected to be favourable to Australian growers.

## 2.2.2 Domestic Pulpwood Consumption

Softwood pulpwood logs are primarily used in the production of wood panels, plywood, medium density fibreboard (MDF) and particleboard, as well as for the production of pulp and paper products, including newsprint, tissue and packaging.

Table 2-2 shows the major Australian pulpwood and panel producers with annual mill intake capacities in excess of 150,000 m<sup>3</sup>.

**Table 2-2:**  
**Major Australian pulpwood processors (annual intake capacity in excess of 150 000 m<sup>3</sup>)**

Company	Facility Type	State	Wood Supply Region	Location	Intake Capacity (m <sup>3</sup> /a)
CHH Panels	MDF <sup>6</sup>	NSW	Central Tablelands	Oberon	570 000
	Particleboard				160 000
Norske Skog	Pulp & Paper		Murray Valley	Tumut	220 000
Visy Pulp & Paper <sup>7</sup>				Albury	520 000
Kimberly-Clark Australia	Pulp	SA	Green Triangle	Millicent	450 000
Alpine MDF	MDF	VIC	Murray Valley	Wangaratta	250 000
D&R Henderson	Particleboard			Benalla	230 000
Australian Paper	Pulp		Central Gippsland	Maryvale	750 000
Laminex	MDF	QLD	South East Queensland	Gympie	410 000
	Particleboard	WA	Western Australia	Dardanup	341 000
Norske Skog	Pulp & Paper	TAS	Southern Tasmania	Boyer	600 000

Source: Pöyry

Overall demand for softwood pulpwood has grown over the past decade as panel and pulp capacity has expanded.

There has been an increase in the production and consumption of paper products utilising softwood pulpwood in Australia<sup>8</sup>. Of these products, paper packaging and paperboard contributed to 75% of total production, and made up 63% of domestic apparent consumption in 2006/07. Newsprint production and apparent consumption accounted for 16% and 27% respectively, and tissue production and apparent consumption 9% and 10% respectively.

Production capacity of packaging paper and paperboard increased with the commissioning of Visy's Tumut mill in 2001. Demand for packaging and paperboard

<sup>6</sup> Potential change in ownership in 2010, to Borg Manufacturing.

<sup>7</sup> Resource input figures cited for Visy are estimates of requirements after the commencement of their second paper machine

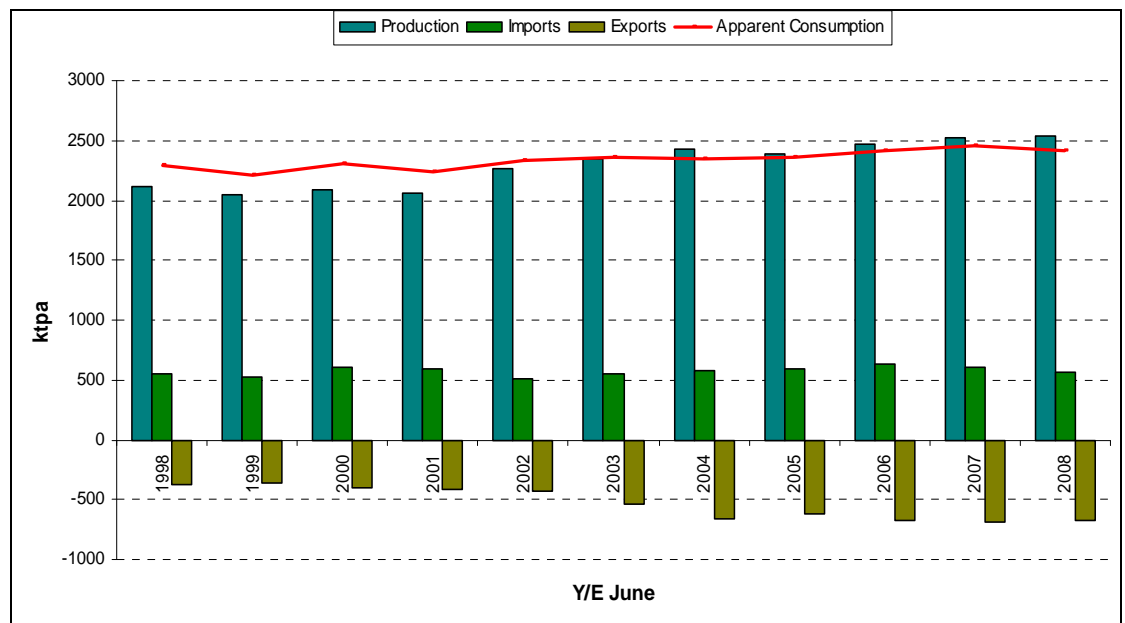
<sup>8</sup> Pulp and paper products included are newsprint, tissue, packaging paper and paperboard.

products is growing slowly, and it is the only pulp and paper sector where local production exceeds apparent consumption, resulting in a significant proportion being exported. Visy's expansion of the Tumut mill will effectively double existing fibre requirements, adding significantly to pulpwood demand in the Murray Valley wood supply region.

Newsprint demand is closely associated with local production, which is predominantly for import replacement, and mainly manufactured by Norske Skog at its Boyer and Albury mills. Demand for newsprint fell in 2006/07 and 2007/08 compared to the levels of 2005/06. Pulpwood demand from tissue producers increased during the last decade and reached its peak in 2006/07, before falling in 2007/08. Demand for packaging paper and paperboard remained relatively stable throughout this period.

Figure 2-5 below shows the production and consumption of paper products that use significant proportions of softwood fibre.

**Figure 2-5:**  
**Australian apparent domestic consumption of selected paper products (newsprint, tissue, packaging paper and paperboard)**



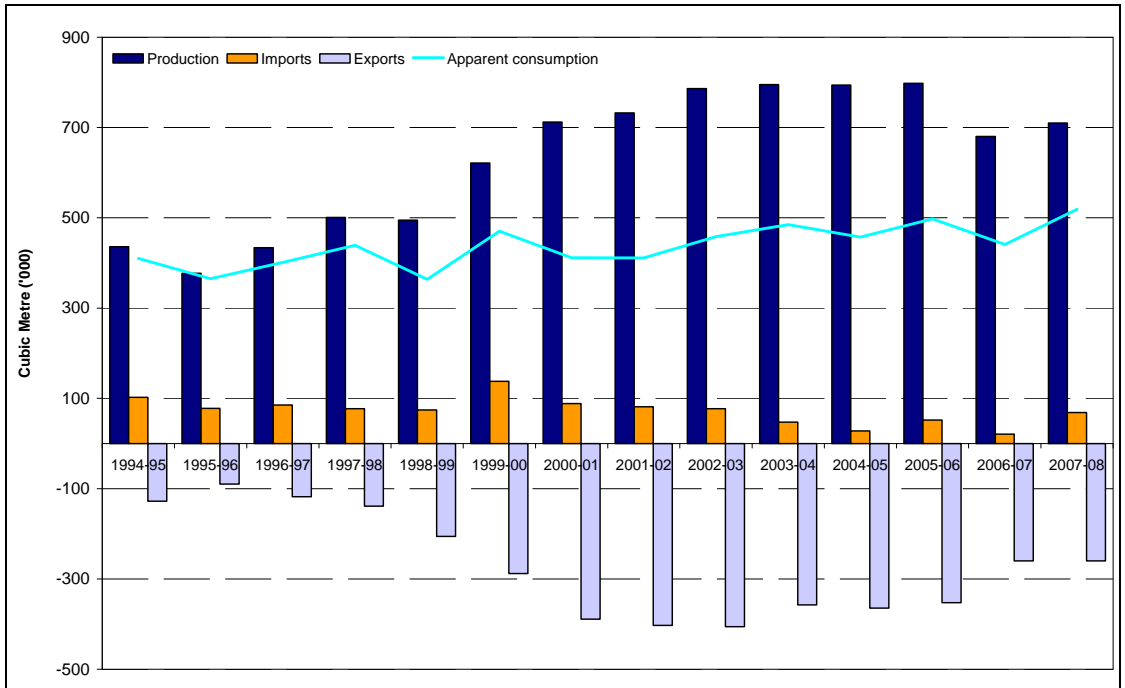
Source: IndustryEdge 2008, Pöyry.

Apparent consumption of MDF has increased gradually over the last 10 years at an average rate of 3.6%/a, although domestic consumption has dropped considerably since 2005/06 (Figure 2-6). Although processing production has increased at an average rate of 3.7%/a over the last 10 years to 2007/08, reduced exports and the limited domestic market has resulted in under-utilisation of capacity. The decision not to reopen the CHH Bell Bay mill following a fire, and the recent closure of the Laminex Welshpool WA mill are perhaps indications of the difficulty in this market. In the wake of this capacity adjustment, the remaining mills should be in a position to increase capacity utilisation.

Annual production of particleboard has also grown gradually over the last 10 years, to approximately 1 million m<sup>3</sup> (Figure 2-7), an average rate of growth of 1%/a. However, 2006/07 also indicated a drop in production and average growth since 2003/04 has

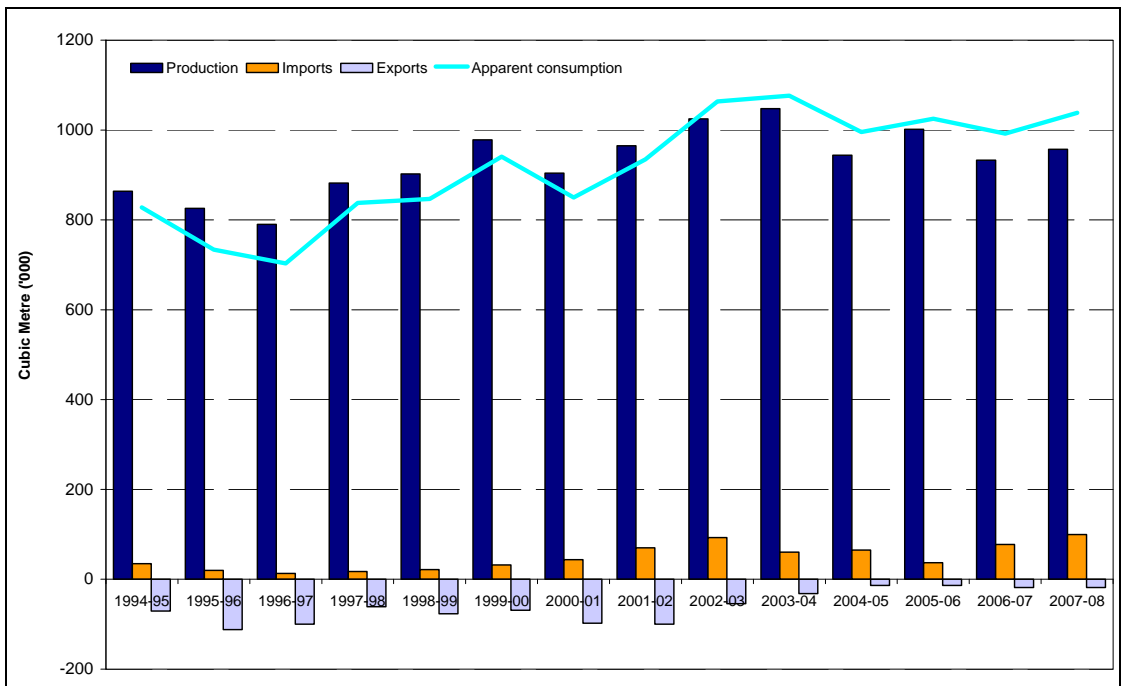
been -2%/a . Apparent consumption has followed a similar trend, not surprising given the limited export potential of particleboard, decreasing at an average rate of 1%/a over the past 4 years.

**Figure 2-6:**  
**Australian domestic production and consumption of medium density fibreboard (MDF)**



Source: ABARE 2008, Pöyry, WTA

**Figure 2-7:**  
**Australian domestic production and consumption of particleboard**

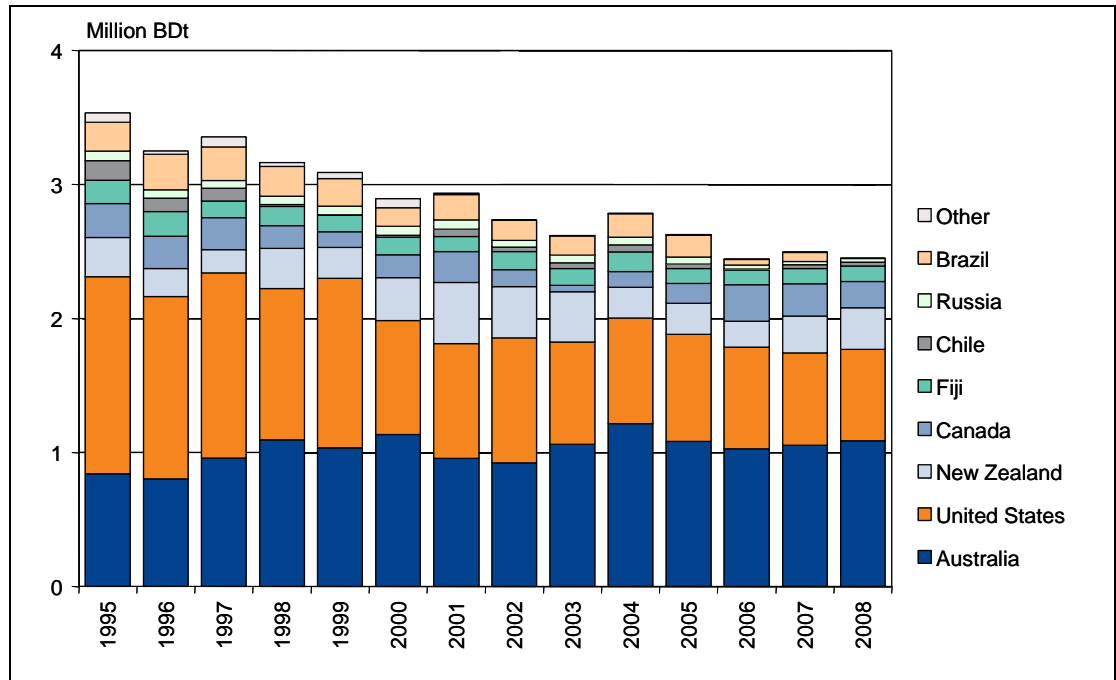


Source: ABARE 2008, Pöyry, WTA

### 2.2.3 Softwood Pulpwood Export

Australia is one of the world’s largest woodchip exporters, and Japan, which dominates the world trade in woodchips, is Australia’s largest market, accepting the majority of Australia’s woodchip exports.

**Figure 2-8:  
Softwood woodchip exporters into Japan**



Japan’s total import of softwood woodchips has declined over the past decade, from approximately 3.5 million Bone Dry Metric tonnes (BDMt) in 1995 to approximately 2.4 million BDMt in 2008<sup>9</sup>. Reasons for this include a significant increase in recovered paper consumption, flat or reducing growth in demand for fibre for the production of newsprint and packaging, and domestic softwood woodchip prices falling below import prices. However, Australia’s share of the Japanese import market has increased from approximately 24% to more than 44% during this time, largely at the expense of North America.

The Japanese softwood resources are coming to (over-) maturity, and the utilisation rate will enhance proportionally. However, virtually all of the softwood plantation resources are grown to produce sawlogs or peeler logs, and the domestic solidwood processing industries are downsizing. Hence, the domestic supply of pulpwood residual woodchip is not expected to increase significantly in volume terms. This implies that the Japanese softwood-based pulp production will continue relying largely on imported woodchip.

As such, Japan’s demand for imported softwood woodchip will remain sizeable and sustainable, with a downward pressure in the short term and a gradual declining trend in the long run.

<sup>9</sup> WTA.

### **3 REGIONAL FOREST RESOURCE**

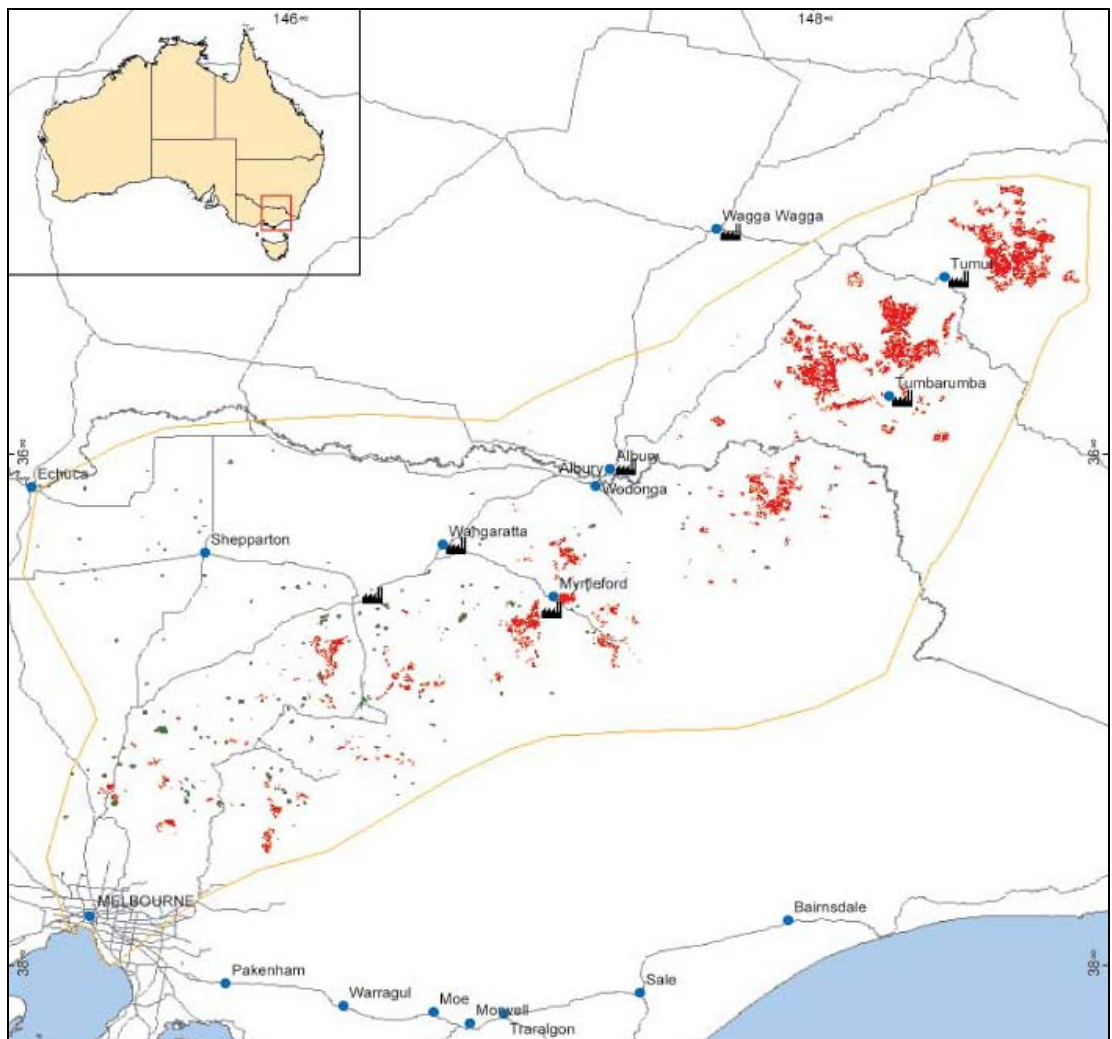
#### **3.1 Softwood Resources**

The Project Manager proposes that the plantations to be established will be located within commercial haulage distances to sawmills and pulp mills in the regions surrounding Tumut/Tumbarumba/Hume and Bathurst/Oberon.

##### **3.1.1 Hume Region (Tumut/Tumbarumba)**

The south-west slopes of NSW and north-east Victoria together have Australia's largest concentration of softwood plantations and associated processing industries. The area is known as the Murray Valley wood supply region, or the Hume region (Figure 3-1). Softwood plantations were first established in the 1920s, but it was not until the period 1950-1980 that establishment occurred on a significant scale, as a result of the Commonwealth Softwood Forestry Agreements with the states. The region had a total softwood plantation resource of some 187 272 ha in 2008<sup>4</sup>. By far the greatest concentration of resources is around the Tumut/Tumbarumba region.

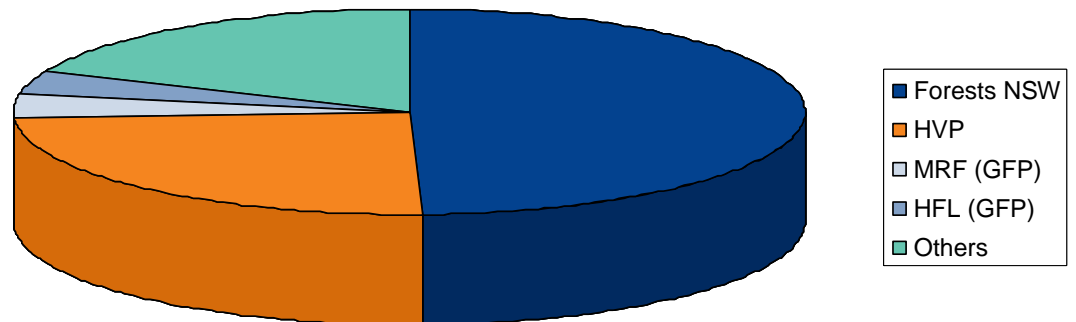
**Figure 3-1:**  
**Murray Valley WSR showing plantations (softwood plantations are coloured red) and processing industry**



Source: BRS 2006

There are a number of softwood plantation owners in the region. The major owners are Forests New South Wales (FNSW) (49%), Hancock Victoria Plantations (HVP) (25%), Murray River Forests (MRF) and Hume Forests Ltd (HFL) (both subsidiaries of Global Forest Products, GFP) (8%). There is also a substantial and growing amount of softwood plantations, owned or managed by a number of private growers and/or forestry and/or managed investment scheme (MIS) companies in the region, including Willmott Forests, Gunns, Birnam Forests, AgriWealth and Gerard Industries. These make up approximately 19% of the available softwood resources (Figure 3-2).

**Figure 3-2:**  
**Softwood plantation ownership in the Murray Valley WSR**



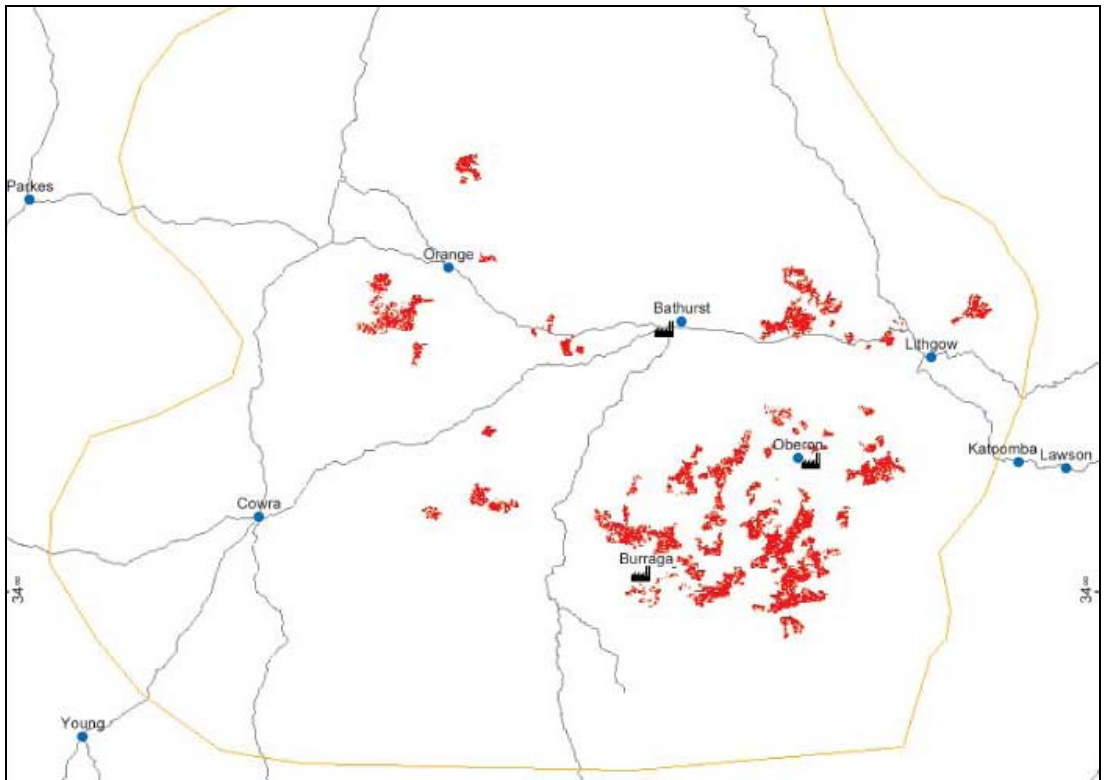
Source: Pöyry.

### 3.1.2 Macquarie Region (Bathurst/Oberon)

The Macquarie region is located west of Sydney and the Blue Mountains in central New South Wales (NSW). It is also known as the Central Tablelands of NSW wood supply region (Figure 3-3). The region had a total softwood plantation resource of 80 274 ha in 2008<sup>4</sup>. The softwood plantations are concentrated around Oberon, Bathurst, Lithgow and Orange.

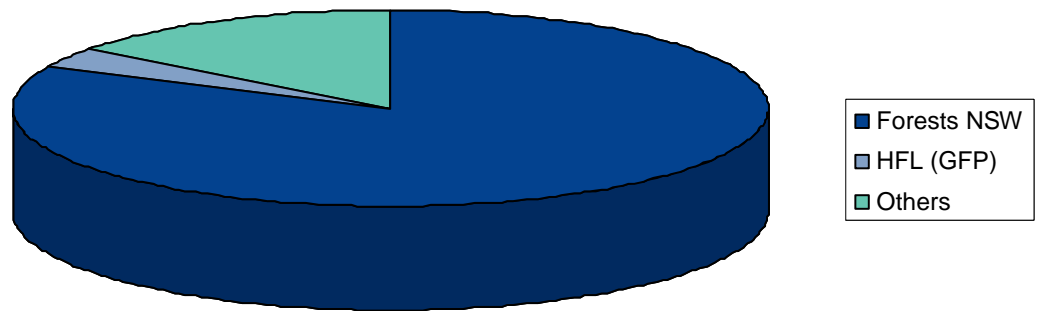
There are only a few softwood plantation owners in the region. The major owner in the region is FNSW, with 82% of the resource under management. HFL owns 3% of the softwood plantations, with the remaining 15% owned and/or managed by a number of smaller private growers (Figure 3-4).

**Figure 3-3:**  
**Central Tablelands WSR showing plantations (softwood plantations are coloured red)**  
**and processing industry**



Source: BRS 2006

**Figure 3-4:**  
**Softwood plantation ownership in the Central Tablelands WSR**



Source: Pöyry

### 3.2 Regional Processing Facilities

The Hume and Macquarie regions are two of the largest softwood growing and processing regions in Australia. They both support sawmills and pulp mills of a significant scale. The major softwood processing operations within reasonable haulage distance (100 km) of the proposed Project plantations are shown in Table 3-1 and Table 3-2. At full operating capacity, these processing facilities have the combined potential to process approximately 5.2 million m<sup>3</sup>/a of softwood.

Accordingly, there is likely to be a strong demand for both sawlog and pulpwood from softwood plantation thinning and clearfall operations in these regions, both now and well into the future. In particular, with the expansion of Visy's Tumut pulp and paper mill, demand for pulpwood will be very high in the Hume region, with pulpwood supplies for the Visy mill also likely to be sourced from the Macquarie region.

The Project plantations are well placed to take advantage of this strong market demand for softwood plantation sawlog and pulpwood resources.

**Table 3-1:  
Key softwood sawlog processing operations in the Hume and Macquarie regions**

Region	Company	Location / Mill	Main Product Type	Softwood Inputs (000's m <sup>3</sup> /a)
Hume Region	Carter Holt Harvey Wood Products Australia (CHHWPA)	Myrtleford Sawmill	Structural timber, remanufacturing	255
		Myrtleford Plymill	Plywood	55
		Tumut Sawmill	Structural timber, remanufacturing	640
	Hyne & Sons	Tumbarumba Sawmill	Structural timber, remanufacturing, edge & face glued products	840
	Big River Timbers (Ausply)	Wagga Wagga Plymill	Plywood	50
	D & R Henderson	Benalla Sawmill	Structural timber, remanufacturing	150
	Others	Small Sawmills/ Preservation	Landscape, preservation & structural timber	35
Macquarie Region	Highland Pine Products (HPP)	Oberon Sawmill	Structural timber, remanufacturing	630
	Allied Timber Products (ATP)	Raglan Sawmill	Structural timber	110
	Australian United Timbers (AUT)	Burruga Sawmill	Landscape & preservation	20
	Others	Small sawmills	Structural timber & export	25

Source: Pöyry.

**Table 3-2:  
Key softwood pulpwood processing operations in the Hume and Macquarie regions**

Region	Company	Location / Mill	Softwood Inputs (000's m <sup>3</sup> /a)			
			Residues	In-forest Chip	Pulpwood	Total
Hume Region	CHHWPA	Tumut Particleboard Mill	160			160
	Visy Pulp & Paper	Tumut Pulp & Paper Mill	290		535	825 *
	Norske Skog	Albury Newsprint Mill	65		220	285
	Dominance - Alpine MDF	Wangaratta MDF Mill	65		170	235
	D & R Henderson	Benalla Particleboard Mill	65		150	215
Macquarie Region	CHHWPA	Oberon MDF Mill	190	380	60	630
		Oberon Particleboard Mill				
	Jeld-Wen	Oberon Door Skin Plant	60			60

Source: Pöyry

\* Softwood inputs to Visy's Tumut pulp & paper mill are 1.9 million m<sup>3</sup>/a.

The two regions are well placed in terms of access to the major timber markets and population centres of Sydney, Melbourne and the greater south-eastern Australian region. The demand for sawlogs is dependent upon sawmill production, market demands and resource availability. Recent experience in the depressed domestic house construction market indicates that the major sawmillers (Hyne & Son and CHHWPA) intend to maintain production at high throughput levels in order to achieve low production costs.

CHHWPA has recently purchased the Weyerhaeuser sawmilling assets, including the Tumut sawmill. This mill has recently undertaken upgrades to expand log intake up to 650 000 m<sup>3</sup>/a. The Hyne & Son Tumbarumba sawmill underwent a significant upgrade and capacity expansion in 2004/05. Sawlog intake at Hyne's Tumbarumba sawmill for 2006/07 is estimated at 840 000 m<sup>3</sup>/a and has the potential to mill up to 1 million m<sup>3</sup>/a by 2014/15.

Highland Pine Products (HPP) sawmill is the major processor of sawlogs in the Macquarie region. HPP is a joint venture between CHHWPA and Boral. It also has the capacity to increase production with an improving market for sawn timber. In addition, the new Allied Timber Products (ATP) sawmill at Bathurst specialises in sawing small sawlogs (12 to 25 cm) for the production of timbers for a range of products including fencing, landscaping, pallets, packaging and framing. The ATP sawmill is a valuable market for small sized softwood sawlogs.

Export of the Project's radiata sawlogs is unlikely to be feasible from the Hume region given the haulage distance to port and the strong regional demand. However, in recent

times, at least two different export sawlog operations have begun or been proposed in the Macquarie region utilising rail transport to the port of Botany. Although it is early days, it does indicate potential for softwood sawlogs harvested from the Project plantations to be exported.

## 4 LOG PRICES

The Australian forest products industry is characterised by long-term log supply contracts (up to 20 years), with stable price review mechanisms based on various revenue or cost indicators. Not much wood is sold on a strictly free market basis. As a result, details of individual log sales transactions are not publicly available, making it difficult to identify market log prices. However, the Australian Pine Log Price Index (APLPI)<sup>2</sup> publication provides weighted average stumpage prices<sup>10</sup> and indices for various grades of sawlogs and pulpwood as sold by key log sellers throughout Australia.

### 4.1 Domestic Sawlog Prices

The government-owned softwood plantation growers, Forests NSW, Forestry SA, Forestry Plantations Queensland and Forest Products Commission (WA) are the major sellers of softwood sawlogs and pulpwood in the Australian market, and log sales between various other parties tend to be referenced to prices paid to these growers in their respective operational regions.

The Project Manager has indicated in the IM that radiata pine investments will be made in the Hume and Macquarie regions of NSW. Comparison of the APLPI to other sources indicates that the APLPI provides a reasonable estimate of current stumpage prices expected for radiata pine in the Hume and Macquarie regions. Pöyry expects that it will continue to do so into the future. The average weighted softwood sawlog and pulpwood stumpage prices reported by APLPI are detailed below in Table 4-1.

**Table 4-1:  
Latest weighted average softwood sawlog and pulpwood stumpage prices reported by the APLPI (July-December 2008)**

Log Grade	Description	Weighted Average Log Price (AUD/m <sup>3</sup> )
Small sawlogs	< 24.0 cm SEDUB <sup>11</sup>	35.20
Intermediate sawlogs	23.9 to 32.0 cm SEDUB	48.59
Medium sawlogs	31.9 to 44.0 cm SEDUB	68.84
Large sawlogs	> 43.9 cm SEDUB	83.54
Preservation logs	All logs sold to domestic timber treatment plants including rails, poles and posts.	23.78
Pulpwood	All logs sold to domestic manufacturers of pulp and paper, woodchip/flake-based panels and other such products, including logs processed from export woodchip.	11.76
Salvage sawlogs	All logs excluded from the above products on the basis of price and wood quality.	28.34

Source: KPMG 2009

Historically, private plantation owners have not achieved APLPI stumpage prices. Negotiated stumpages prices may be lower for private growers due to the quality of

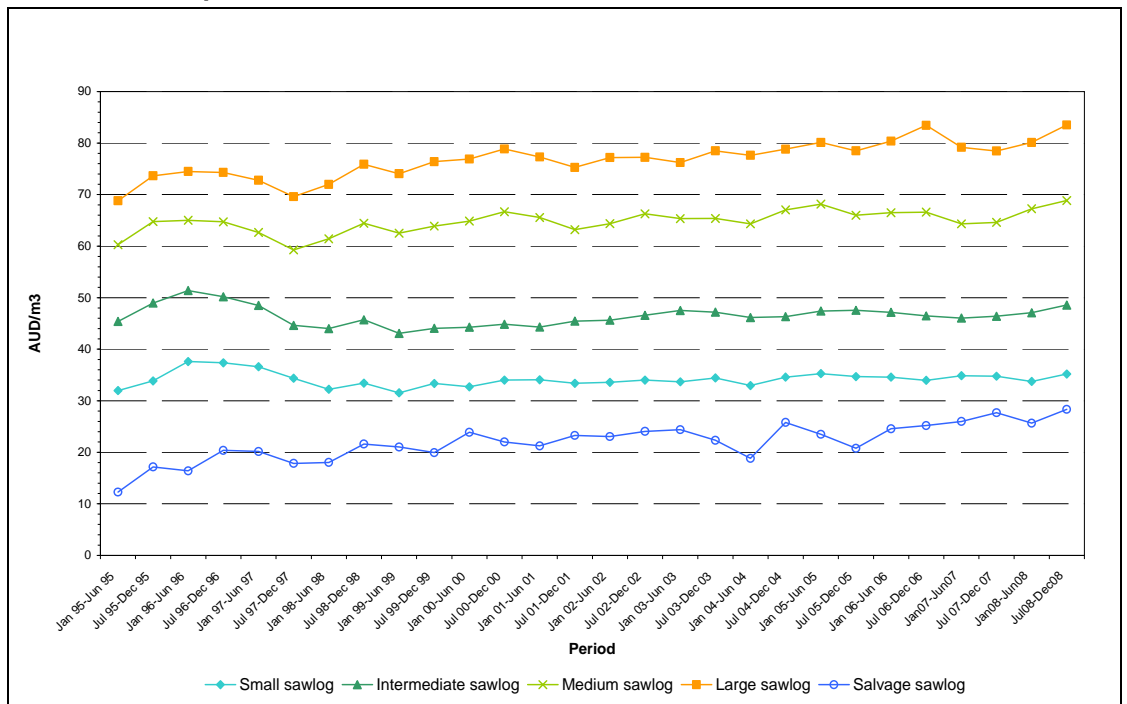
<sup>10</sup> Stumpage prices are the prices paid for the wood at the stump (excluding the costs of harvest, loading and transport to the mill or wharf gate).

<sup>11</sup> Small End Diameter Under-Bark.

the resource, distance to markets, inadequate roading infrastructure and the small volumes involved. However, increasing demand for pulpwood and small sawlogs resulting from the expansion of the Visy pulp and paper mill at Tumut and the ATP mill at Bathurst are expected to increase demand for small logs. This increase is expected to allow greater market access for products from thinning operations from private growers which in turn will improve the quality of products produced and returns from their plantation resources at clearfall.

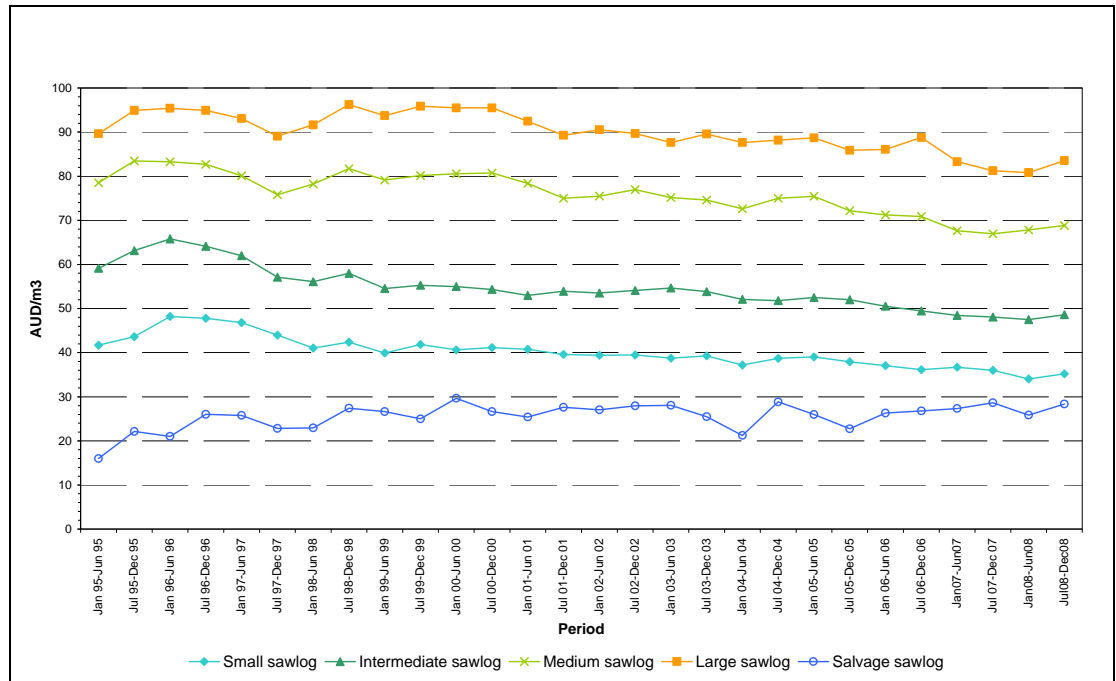
Nominal price movements for sawlog and salvage log stumpages since 1995 are shown in Figure 4-1. From 1998, prices have been maintained or have increased slightly in nominal terms. Sawlog stumpage prices in real terms (adjusted for inflation), shown in Figure 4-2, have decreased over the last 10 years.

**Figure 4-1:**  
**APLPI nominal price series 1995-2008**



Source: KPMG 2009

**Figure 4-2:**  
**APLPI Real Price Series 1995-2007 (indexed to July-December 2008 prices)**

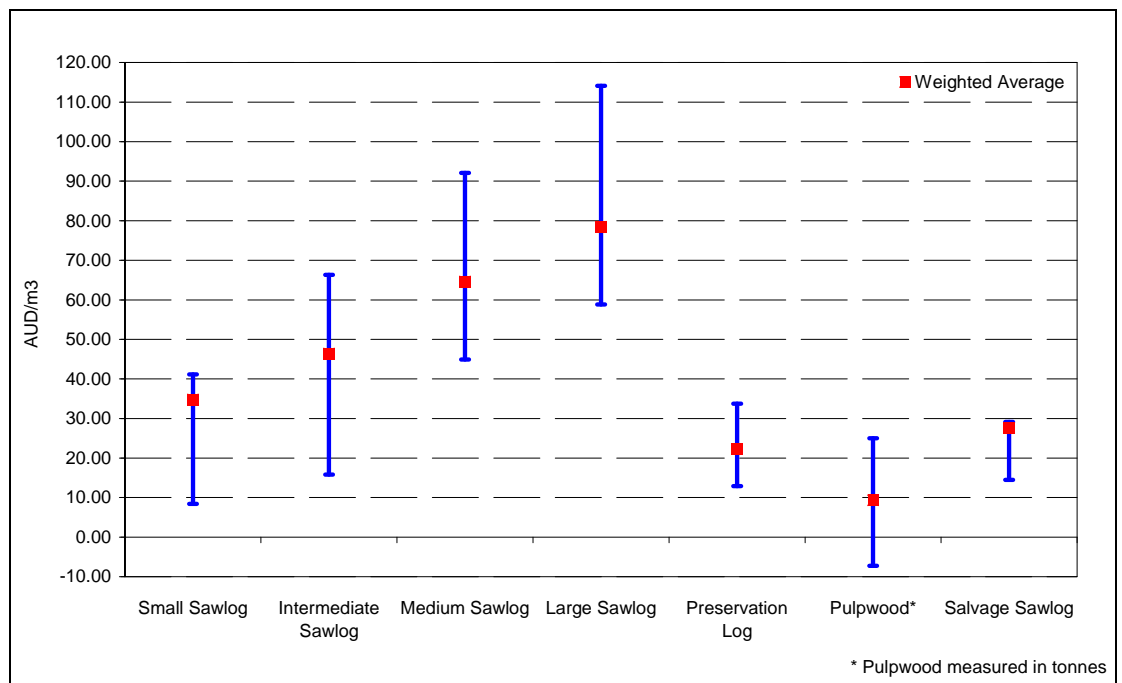
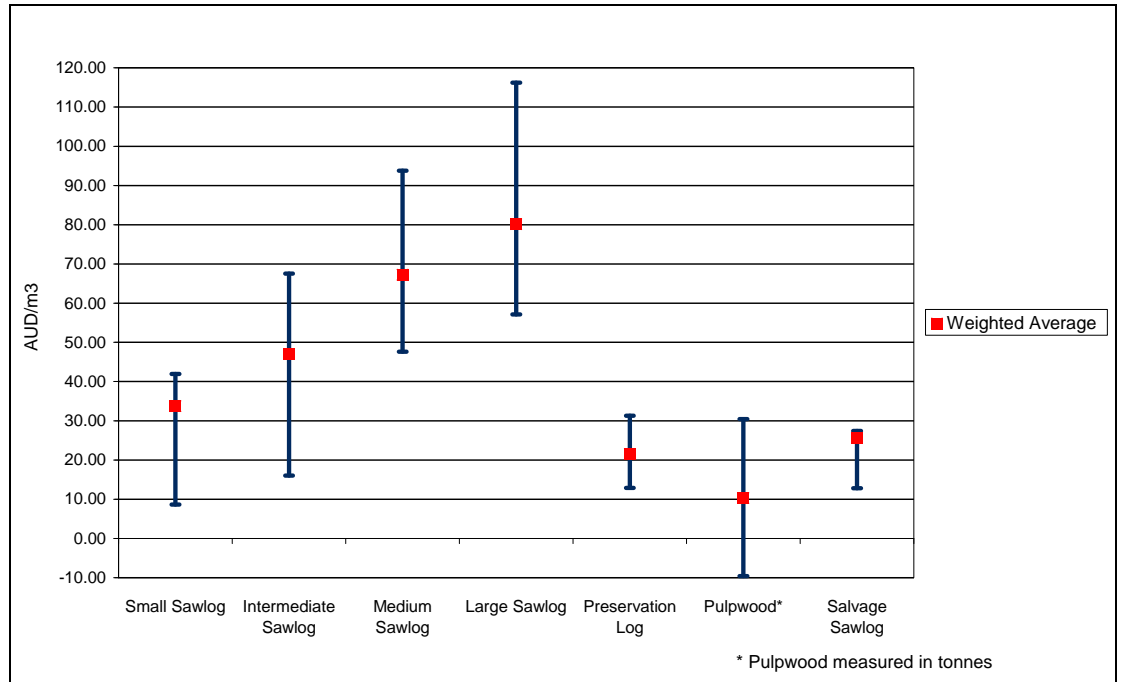


Source: KPMG 2009

Because long term contracts incorporating stable price review mechanisms based on various revenue or cost indicators are the most common arrangements for log sales in Australia, prices do not change significantly from year to year. Mainly, they tend to follow the market prices for MGP10 or MGP12 grade structural softwood sawn timber. Furthermore, Australia’s logs sales are primarily into the domestic market, and thus do not face exchange rate fluctuations or the significant changes in demand that are encountered by some countries, such as New Zealand, that export high volumes of logs.

The average range in stumpage prices for domestic logs per size class is considerable (Figure 4-3) and particularly evident in the intermediate, medium and large sawlog diameter classes. This perhaps reflects differences in prices depending on the level of competition for wood resources in particular regions. In Pöyry’s experience, regions with large, varied and integrated markets for softwood sawlogs tend to attract higher prices than those that do not, which would contribute to the broad range of prices reported by the APLPI.

**Figure 4-3:**  
**Latest weighted average domestic sawlog and pulpwood stumpage prices and ranges reported by APLPI (Jan-Jun 2008)**

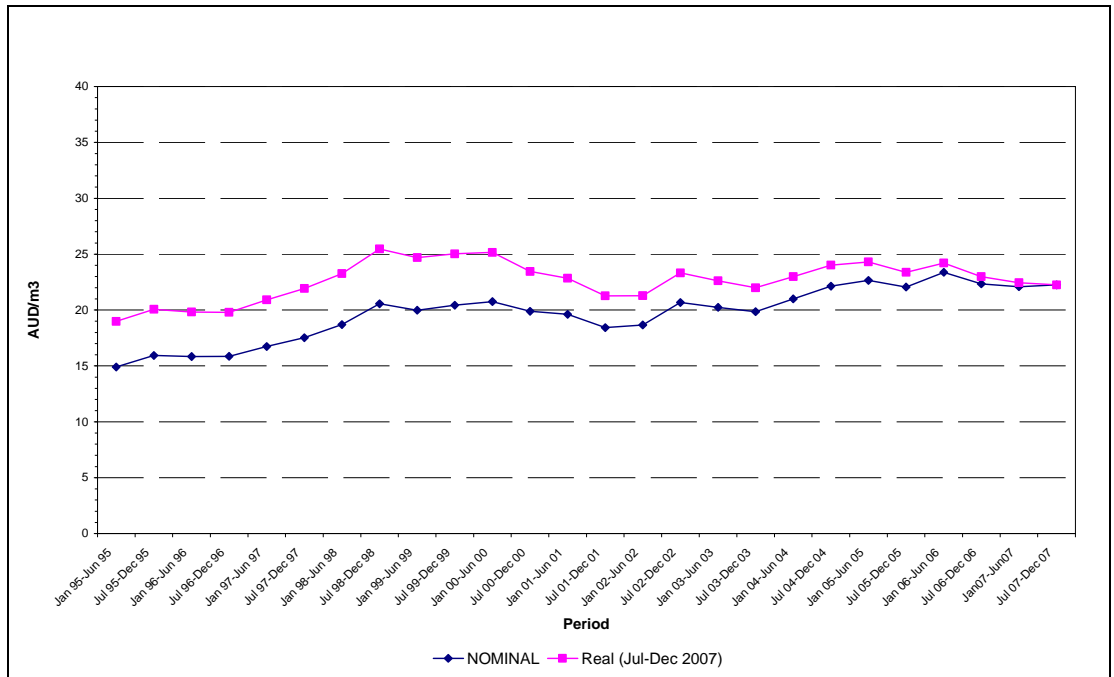


Source: KPMG 2008

## 4.2 Preservation Log Prices

Domestic treatment plants use preservation logs for products, including poles, rails and posts. These logs are generally smaller, and necessarily straighter and importantly mainly derived from thinning operations. The APLPI price series for preservation logs indicate an upward price trend in both nominal and real terms over the past 10 years, with the strong growth in the period 1995 to 1999 partly driven by viticulture demand.

**Figure 4-4:**  
**APLPI preservation log price series 1995-2007**

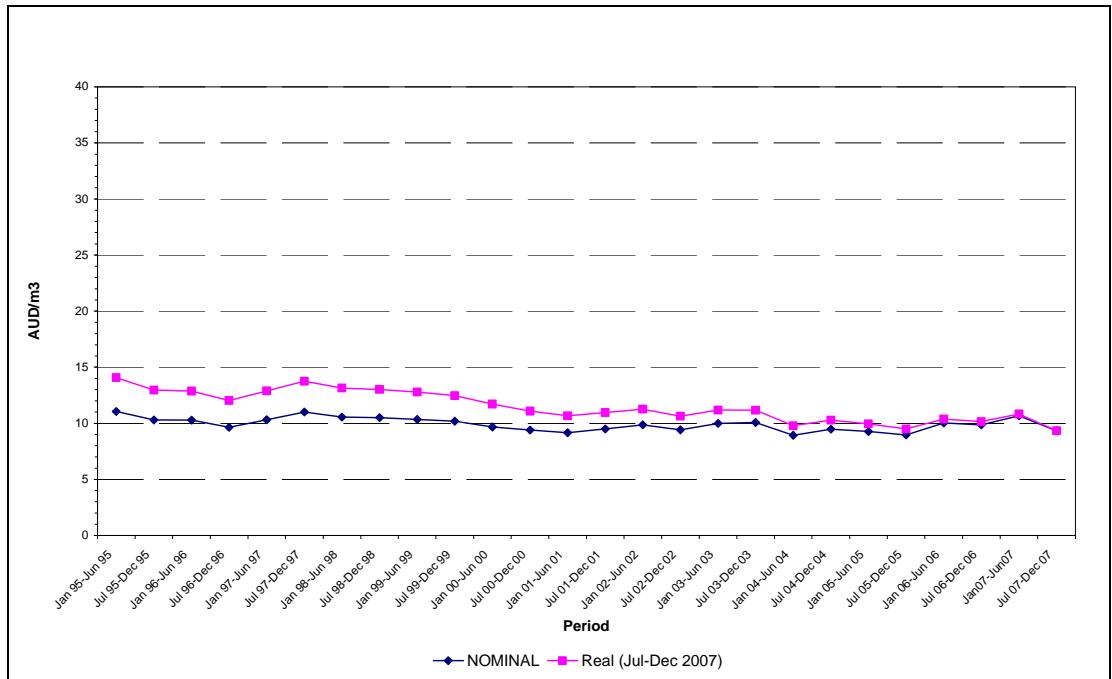


Source: KPMG 2008

### 4.3 Pulpwood Prices

The domestic pulpwood price trend has pointed downward in the decade since 1995, although there was a small price recovery in 1996/97, as shown in Figure 4-5. July-December 2007 average pulpwood prices were reported at \$9.33/GMt, approximately 6% lower than the APLPI reported 12 months previously. This price reduction may have been due to rebates being paid for burnt wood that was being salvaged at this time in Victoria and NSW from the 2006/07 fire season.

**Figure 4-5:  
APLPI pulpwood prices series 1995-2007**



Source: KPMG 2008

Prices for pulpwood in the Hume and Macquarie regions have been negotiated in long term supply agreements between the domestic processors (CHHWPA, Norske Skog and Visy) and the forest growers (FNSW, HVP and HFL). Plantations in these areas are not accessible to the export pulpwood market and operate independently of export prices. We predict that supply for pulpwood in these regions will tighten considerably now that the expansion of the Visy mill at Tumut has been completed. With this increasing demand we would anticipate an opportunity for forest growers (such as AgriWealth) to achieve prices above long term supply agreement prices that are largely intended to encourage industrial development in the region.

## 5 DISCLAIMER

Poyry Forest Industry Pty Ltd (“Pöyry”) has prepared this report for AgriWealth Capital Limited (the “Project Manager”) in accordance with the scope of work outlined in its Management Consulting Agreement with the Project Manager. The Project Manager requested this report to be prepared for inclusion in an Information Memorandum (IM).

In preparing this report, Pöyry has relied on information made available by the Project Manager together with other information which is outlined in this report. Whilst this information has been checked for accuracy, there is a range of factors that can impact on the results achieved. Neither Pöyry nor its employees responsible for the production of this report take responsibility for omissions or errors in any other matters in the IM that are not referred to in this report.

Nothing in the report is, or should be relied upon as a promise by Pöyry as to the future volumes and prices that will eventuate in the Australian softwood market. Actual sales prices at the time the Project plantations are harvested may be significantly above or below the current prices given in this report. The forest industry has similar inherent risks as other forms of land based primary production, and a long investment period. These risks may be material to the expected outcomes. Pöyry does not accept responsibility for updating the information contained in the report after the date of production.

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1. Pöyry has been retained by the Project Manager to provide an Independent Forester’s Report and an Independent Market Report for inclusion in the IM.
2. Pöyry anticipates that further engagements in relation to the provision of forestry consulting advice may be entered into with the Project Manager on an as-required basis.
3. Pöyry does not have any direct investment in AgriWealth Capital Limited (the “Project Manager”) or their business interests, and has no commercial interests in the financial products being offered other than as a service provider to the Project Manager.
4. Pöyry does not hold an Australian Financial Services Licence and is not operating under such a licence in providing this report.

Yours sincerely  
Poyry Forest Industry Pty Ltd



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