

# Strategic Review of Forestry Tasmania Extract of Stage 1 Report (Redacted)

3 FEBRUARY 2012

Prepared for Tasmanian Government

42807533



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# **Table of Contents**

1	Intro	duction	1
	1.1	Strategic shifts in the industry	1
	1.2	Performance of Forestry Tasmania	
	1.3	Approach to this review	6
2	Over	view of Forestry Tasmania	7
	2.1	Legislative framework	7
	2.2	Shareholder interests	
	2.3	Organisational structure	
	2.4	Overview of business model	11
	2.4.1	Commercial activities	11
	2.4.2	Non-commercial activities	13
3	Resc	ource and industry structure	15
	3.1	Resource supply	15
	3.2	Industry structure and supply chains	
	3.2.1	Forest management sector	17
	3.2.2	Forest industry contracting sector	18
	3.2.3	Processing sector	19
4	Mark	ets and competitiveness	21
	4.1	Woodchips and pulplogs	22
	4.1.1	Demand	22
	4.1.2	Prices	27
	4.1.3	Outlook	30
	4.2	Log exports	32
	4.2.1	Demand	32
	4.2.2	Prices	33
		Outlook	34
	4.3	Sawntimber	35
	4.3.1	Demand	
	4.3.2	Prices	
	4.3.3	Outlook	
	4.4	Summary	
5		rences	
6	Limit	ations	43



#### **Tables** Table 1-1 Table 2-1 Table 2-2 FT supply commitments, at September 2011......13 Table 2-3 Forestry Tasmania wood production by major product type (2006 – 2011) ...... 16 Table 3-1 Profile of businesses within the Tasmanian contracting sector (May 2011)...... 18 Table 3-2 Table 3-3 Table 3-4 Summary of market outlook for woodchips and pulp logs over time .......31 Table 4-1 Table 4-2 Table 4-3 Table 4-4 Table 4-5 Table 4-6 **Figures** Figure 1-1 Forestry Tasmania senior management structure, at August 2011 .......9 Figure 2-1 Figure 2-2 Figure 3-1 Figure 4-1 Figure 4-2 Figure 4-3 Japanese hardwood woodchip imports by source country (1994 – 2010) ...... 24 Figure 4-4 Japanese wood pulp imports by source country\* (1994 – 2010)......24 Figure 4-5 Chinese paper and paperboard production by type (1990 – 2011)......25 Figure 4-6 Figure 4-7 Figure 4-8 Figure 4-9 Chinese exports of printing and writing paper (1995 – 2010)......27 Figure 4-10

Nominal FOB price of hardwood woodchip, Australian ports to Japan (1990 – 2010).. 28

Real FOB price of hardwood woodchip, Australian ports to Japan (1990 – 2010)....... 28



Figure 4-11

Figure 4-12

Figure 4-13	Monthly CIF price of hardwood chip exports to Japan (USD, 2000 – 2011)	29
Figure 4-14	Quarterly CIF price of hardwood woodchip exports to China (USD, 2006 – 2011)	30
Figure 4-15	Monthly CIF price of hardwood pulp exports to China (USD, 2006 - 2011)	30
Figure 4-16	Volume and source of hardwood log imports by China (1995 – 2010)	33
Figure 4-17	Indicative prices for hardwood logs on international markets (2003 – 2011)	34
Figure 4-18	Baltic dry index and average freight rates (2000 – 2011)	34
Figure 4-19	Hardwood sawn timber production and consumption trends (1984 – 2009)	36
Figure 4-20	Value of Australian residential alterations and additions (quarterly)	37
Figure 4-21	Hardwood structural and flooring price indices	38

# **Appendices**

Appendix A Terms of Reference



# **Abbreviations**

Abbreviation	Description
ADMT	Air Dried Metric Tonne
BDMT	Bone Dry Metric Tonne
CIF	Cost, Insurance, Freight
cso	Community Service Obligations
FT	Forestry Tasmania
FTE	Full time equivalent
FOB	Free on Board
GBE	Government Business Enterprise
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GMT	Green Metric Tonne
ha	Hectares
JAS	Japanese Agricultural Standard
m <sup>3</sup>	Cubic metres
MIS	Managed Investment Scheme, under Corporations Act 2001
RFA	Regional Forest Agreement
TCFA	Tasmanian Community Forest Agreement
TFIA	Tasmanian Forests Intergovernmental Agreement



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# Key issues and findings

- Tasmanian forest industry participants, including Forestry Tasmania, are facing unprecedented significant challenges with changes in local and international markets and exchange rates impacting on export operations.
- The strategic shifts in the operating environment and increasing level of uncertainty have impacted on the operations and financial performance of Forestry Tasmania.
- As recent reports by the Auditor-General and the Legislative Council have highlighted,
   Forestry Tasmania's financial performance has been significantly impacted.
- This strategic review is necessary to ensure Forestry Tasmania continues to be a sustainable business into the future.
- Stage 1 of the Review is a situation assessment and proposes options for future structures and business models for Forestry Tasmania.

The Tasmanian government has commissioned a strategic review of Forestry Tasmania (FT), to consider the options for future structures, governance arrangements and business models under which FT may operate in the face of significant recent changes and major challenges ahead for the Tasmanian forest industry. URS Australia Pty Ltd (URS), in conjunction with Deloitte Touche Tohmatsu Limited (Deloitte), have been engaged to conduct this review (the Review).

The Terms of Reference for this review are attached at Appendix A.

## 1.1 Strategic shifts in the industry

The Tasmanian forest industry has experienced considerable changes in the prevailing operating environment over a period of time. However, recent changes in key markets, industry structures and the forest resource base represent strategic shifts for all participants including FT. These shifts, summarised in Figure 1-1, are the key drivers for this review, which is intended to assist in strategically positioning FT for the future.

#### Changes in key markets

FT is highly dependent on export markets, specifically for the sale of hardwood pulpwood fibre (through domestic processors), which accounted for approximately 50% of sales revenue in recent years, and also veneer logs, sold either directly (exported as logs) or through domestic-based customers supplying rotary peeled veneer sheets (semi-processed products) to export markets. These markets have underpinned the profitability of FT's production of sawlogs and peeler logs for domestic markets, due to the integrated nature of harvesting operations in native forests.

However, demand in these markets for FT wood products has declined substantially in recent years, with adverse impacts on FT's trading position. In particular Japan, which for the past 30 years has been the largest market for Tasmania's woodchip fibre, has significantly reduced its demand for native forest woodchips from Australia. Key drivers for this have included:

- the ongoing impacts of the 2008 global financial crisis on the Japanese demand for pulp and paper;
- increasing preference by Japanese woodchip buyers for plantation based wood fibre and the phasing out of native forest wood fibre supply;
- increasing availability of plantation based woodchips;

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- the relative strength of the Australian dollar, which has reduced the competitive position of Australian exporters in recent times; and
- most recently, and subsequent to recognition of the need for this review, there was the Japanese earthquake and tsunami events in March 2011, which has further impacted on the Japanese pulp and paper industry's capacity and demand to import woodchip fibre.

On account of these key drivers, FT noted in its Corporate Plan 2011/12 to 2013/14 that short term demand for pulpwood grade logs is the worst on record.

Figure 1-1 Strategic shifts in the Tasmanian forest industry

				· · · · · · · · · · · · · · · · · · ·
		Markets		
	From			То
•	Strong demand for hardwood fibre in Japan, providing market for native forest pulp logs	$\Rightarrow$	•	Significant contraction of Japanese market, and stronger preference for plantation fibre
•	Australia has major influence on the woodchip price in premium Japanese market	$\Rightarrow$	•	Price negotiations within commoditised Chinese markets
	Competitive Australian dollar	$\Rightarrow$	•	High Australian dollar weakening export market competitiveness, and increasing potential for a rise in imports
	Hardwood timber used for structural applications	$\Rightarrow$		Softwood and engineered wood products dominating structural applications
	Indu	stry struc	ture	ı
	From			То
•	Dominant customer controlling a number of sawmills and woodchip export facilities	$\Rightarrow$	•	Smaller scale businesses operating in fragmented configuration across the State
٠	Established infrastructure to support export of FT wood by domestic processors	$\Rightarrow$	•	Reduced access to export facilities, particularly for woodchip fibre exports
٠	Domestic focus for primary processing and value added processing	$\Rightarrow$	•	Increased FT reliance on export markets for sales of logs or semi-processed wood
•	FT focus on forest management and stumpage sales	$\Rightarrow$	•	FT with expanded role along the supply chain and carrying increased risk
	FT profits able to fund commercial and non- commercial activities	$\Rightarrow$	•	FT requiring Government support for ongoing delivery of full range of functions
	Re	source ba	ise	
	From			То
•	Large native forest timber resource	$\Rightarrow$	•	Reductions in native timber wood resource with additional hardwood plantation resource to come on stream
•	Legislated minimum supply for resource security and substantial increases in pulpwood sales post RFA	$\Rightarrow$	e	Uncertainty in resource security
•	High level of investment in new plantation assets, primarily through MIS structures	$\Rightarrow$	•	Diminished investment in plantation expansion
•	Expectation that burgeoning plantation estate could provide complementary wood products to native forest supply	$\Rightarrow$	٠	Hardwood plantation supply to sawmills unproven and there is need for revised manufacturing facilities and supply chains

Source: URS

In response to the decline of these traditional markets, FT has sought to diversify its customer base and its product mix. This includes the development of rotary peeled veneer mills located in Tasmania, demonstrably through the establishment of Ta Ann's existing mills, and FT's further development of emerging markets for wood fibre and veneer products in China. Chinese demand for wood and fibre products continues to increase and is expected to provide expanding opportunities for competitive suppliers. However, there are significant differences between the emerging Chinese markets and traditional Japanese markets, with implications for FT's sales outlook. Chinese markets for wood products are generally based on more volatile trading arrangements, with greater capacity to negotiate on volume and price, on a shipment or short-term contract basis, across a range of suppliers.

#### Changes in the industry structure

In response to these changing markets, FT's customer base has continued to evolve and manufacturing facilities have been rationalised. Of particular importance to FT has been the decision by Gunns Limited (Gunns) to move out of processing native forest harvested products. Prior to this decision, Gunns was FT's major customer for sawlogs and pulplogs, accounting for a substantial proportion of Category 1 & 3 sawlog sales and most of FT's pulpwood sales.

Not only has Gunns' decision to exit the native forest industry disrupted FT's sales arrangements with a major customer, it has constrained FT's access to key export markets by setting aside major industry infrastructure in the form of woodchip mills and port export facilities. Notably, Gunns' Triabunna operations provided the only bulk export facility for FT pulp log products produced in Southern forests. The lack of access to this export facility represents a strategic shift in the way FT products can access traditional export markets.

In conjunction with its decision to focus entirely on plantation-based operations, Gunns has sought, and been granted, development approvals to construct a pulpmill at Bell Bay in northern Tasmania. The proposed pulp mill will be based solely on plantation wood fibre, and will produce market pulp for export. Gunns is currently seeking financial backing for the project. If successful, and the pulp mill is constructed, it is anticipated that most if not all of Tasmania's hardwood plantation pulpwood could be processed at the facility, with additional supply needed at times from the mainland plantation estate to meet the proposed mill capacity.

In addition to these changes relating to pulp and paper products, FT and its domestic sawmilling customers will need to respond to continual changes to the needs of the sawn timber markets, particularly in response to competitor domestic softwood manufacturers and timber imports. Domestic consumption of construction based wood products is now dominated by softwood manufacturers, a trend which started in 1980s. Hardwood sawmillers have adjusted to avoid direct competition with the softwood sector by focusing on either the key value characteristics of their product (i.e. high strength, large section and visual use qualities) or their supply chain (i.e. geographical position relative to competitors). Softwood domestic production is now expected to plateau as the national softwood plantation estate has effectively matured, which in turn will result in a rise in softwood imports to meet on-going increases in domestic demand.

#### Changes in the resource base

While grappling with these changing markets, FT is now operating from a resource base that has also changed substantially over time.



Over the past 16 years since FT was corporatised, there has been a significant reduction in the area of multiple use forests available for wood production. This has resulted largely from State and Commonwealth government agreements intended to resolve the balance of use of forested public land in Tasmania. In 1997, the establishment of the *Regional Forest Agreement* (RFA) led to the reservation of an additional 57,000 hectare (ha) of State forests; then in 2005, the *Tasmanian Community Forest Agreement* (TCFA) resulted in the reservation of an additional 135,000 ha of State forests.

As at 30 June 2010, FT was managing approximately 685,000 ha of native forest available for wood production (of which about 77,000 ha is in the Special Timbers Zone and is considered by FT to be non-commercial), and about 700,000 ha of native forest and non-forest managed for purposes other than wood production.

The removal of significant areas of public forest from wood production has generally led to higher costs of production for FT (on a unit basis), particularly through reduced flexibility in accessing wood supply which minimise or optimise cartage distances. In addition, FT carries the significant operating costs of managing the increased area of forest reserves, which do not generate any revenue from wood production.

Both the RFA and the TCFA recognised the impact of additional reservations on future wood production, and incorporated offsets by providing funding for intensive forest management, including thinning of native forests and plantations, to increase the production volumes from State forests. TCFA funding was directed specifically at the target of establishing 16,000 ha of additional hardwood plantations on State forests.

However, the hardwood plantations established by FT or otherwise established on State forest lands are still at an immature stage of development, and the production of sawlogs (pruned and unpruned) is not expected to come on stream in substantial volumes until after 2017. Furthermore, despite considerable investment in relevant research throughout Australia over the past 15 years, the utility of eucalypt plantation timber for high value solid wood products has not yet been commercially proven, in particular to the satisfaction of FT's current customers. Therefore, maximising the value of this additional resource will require investment in revised manufacturing facilities along with the implementation of revised wood processing technologies. The volume of this plantation resource rises to material levels, particularly through the latter end of this decade and through the next decade.

#### Policy settings

Among the range of stakeholder responses to the significant changes in Tasmania's forestry industry, a non-government stakeholder-led initiative was convened to develop a *Statement of Forest Principles*, intended to set out a workable framework for the future of the industry. This Statement, which evolved over a period of time between 2009 and 2011, was supported in broad terms by a range of key stakeholders in the forest industry. However, neither the Tasmanian government nor FT was party to the negotiations around this Statement.

In response to this Statement, the Australian and Tasmanian governments commissioned work through an independent facilitator, Mr Bill Kelty AC, to assist signatories to the Statement to reach a common understanding and interpretation of the Statement and develop an implementation plan that would allow an Agreement to be concluded.

In August 2011, the Australian and Tasmanian governments signed the *Tasmanian Forests Intergovernmental Agreement* (the TFIA). The TFIA recognised the ongoing process within the industry of "structural transformation brought about by changing markets and community values", with the catalyst being the decision by Gunns to exit from the native forest industry. The Agreement set out a compromise position on forest resource utilisation designed to protect jobs, honour all existing forestry contracts and transition the forest industry, while placing significant areas of old growth and high conservation value forest in reserve. The TFIA incorporates funding of up to \$276 million to directly assist those affected and to assist communities in creating new jobs in future.

The TFIA established an Independent Verification Group to advise Governments, Signatories to the Statement of Forest Principles, and other relevant stakeholders on any further legislative requirements that will be needed to underpin guaranteed industry supply, conservation outcomes and an effective transition plan. The Independent Verification Group is expected to provide advice on this broad ranging scope by the end of 2011 to the Prime Minister and the Tasmanian Premier.

# 1.2 Performance of Forestry Tasmania

FT's financial performance during its early years of operation was generally strong. During its first three years of operation, it averaged income tax and dividend payments of \$10.2 million per year, annual average investments in non-current assets of \$18.1 million, and it invested \$5.9 million in a superannuation investment account (TAO 2011).

Since that time, its performance has been mixed, and most recently, it has been operating at a loss. The Legislative Council's recent inquiry into Forestry Tasmania's Financial Performance (2011) noted that, following the initial phase of impressive dividend payments to the State, the situation changed as 'gradually costs rose, returns diminished and assets were devalued. At the same time, export markets and prices became volatile, a problem exacerbated by currency values and political activism. While in the mid-2000s, FT found these factors challenging, though manageable, by 2010 it was operating at a loss' (Legislative Council, 2011).

FT recorded operating losses of \$8.8 million and \$9.2 million for the 2009/10 and 2010/11 financial years respectively<sup>1</sup>. In addition to this decline in profitability, FT has experienced significant cash flow challenges, for reasons that include a high level of outstanding (overdue) debtors. FT's current financial position is discussed further in later sections of this report.

The recent poor financial results mean that under current policy settings, Forestry Tasmania is unable to fulfil its obligations under the *Government Business Enterprises Act 1995* to operate as a successful business.

As a result of this decline in financial performance, and more recently in recognition of FT's critical role in the implementation of the *Statement of Forest Principles* and related outcomes, the enterprise has come under increasing scrutiny from the Parliament and the broader Tasmanian community.

In light of the considerable changes in markets and the operating environment for FT, and the consequent impact on its financial performance, the Tasmanian government has sought this strategic review of the current operating model and the assessment of alternative business models.

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<sup>&</sup>lt;sup>1</sup> Reported operating profit/(loss) data for 2009/10 and 2010/11 is derived from FT's management reports.

# 1.3 Approach to this review

This review is being conducted as a three-staged process, designed to enable ongoing developments in the Tasmanian industry to be considered in parallel. The stages can be described as:

- Stage 1 Situation assessment and options for future structures and business models;
- Stage 2 Detailed examination of scenarios and selected options; and
- Stage 3 Implementation plan for agreed option.

Stage 1 of the Review, which is the focus of this report, is intended to provide an overview and high level analysis of the FT business model, both now and in the future by analysing three related areas of FT's position. Key Stage 1 activities are outlined in Table 1-1.

Table 1-1 Overview of approach to conducting the strategic review

St	age 1 activities	Key elements
1.	Review relevant documentation	<ul> <li>URS and Deloitte requested specific data, reports and related documentation be provided by FT and Government for review.</li> <li>Information included FT financial models, organisational capacity details, contractual obligations, and market outlook information.</li> </ul>
		<ul> <li>The Review also covered other relevant documentation that has been commissioned by the Government, such as the Auditor-General's most recent report on the financial and economic performance of FT.</li> </ul>
		<ul> <li>The objective of the document review was to gain a better understanding of FT's current operating environment and obligations</li> </ul>
2.	Assessment of markets	<ul> <li>URS has drawn on market data and its knowledge of forest industry trends to form a view on the potential future developments in FT's primary wood product markets</li> </ul>
3.	Analysis of financial data	<ul> <li>URS and Deloitte have drawn upon FT's budget reports and cash flow models to establish a view on the current financial situation, ahead of further examining the future outlook in 2016/17 and then 2021/22.</li> </ul>
4.	Development of assessment criteria for business models	<ul> <li>URS and Deloitte developed assessment criteria based on consideration of:</li> </ul>
		<ul> <li>good policy and regulatory practice; and</li> </ul>
		<ul> <li>the commercial imperatives for a Government Business Enterprise (GBE) in Tasmania, and the Tasmanian GBE Reform guidelines introduced in 2011.</li> </ul>
5.	Evaluation of current business model and alternative models	<ul> <li>The assessment criteria developed for this review were applied to the current business model and alternative business models, for comparative purposes.</li> </ul>
6.	Workshop with key State Government stakeholders	<ul> <li>URS and Deloitte conducted a project update workshop with staff from the Department of Treasury and Finance and the Department of Infrastructure, Energy and Resources.</li> </ul>
		<ul> <li>This workshop provided the opportunity to discuss both the approach undertaken and the preliminary findings, for the purpose of obtaining feedback to incorporate in the draft report.</li> </ul>

Source: URS/Deloitte

The approach taken by URS and Deloitte for this Stage 1 of the Review was supported by a range of meetings with key State Government stakeholders and also the FT Board and Management Team. URS and Deloitte are grateful for the ready and willing assistance provided by the FT Board and the General Management Team for the purpose of conducting this review.

#### Key issues and findings

- Forestry Tasmania is a major employer within the State, currently employing around 380 staff and around 1,200 contractors across its operations and districts.
- Forestry Tasmania undertakes the sustainable management of State forests to optimise community benefit, including the sustainable production and delivery of forestry products and services, the facilitation of new forest based industries, the conservation of natural and cultural heritage values and the provision of education, recreation and tourism services.
- As a Government business, Forestry Tasmania is guided by a governance and legislative framework that incorporates both commercial and non-commercial objectives.
- Forestry Tasmania has responsibility for optimising both the economic returns from its wood
  production activities and the benefits to the public and the State of the non-wood value of
  State forests. This is a much broader focus than for most businesses and presents challenges for
  the commercial focus of Forestry Tasmania.
- Forestry Tasmania's operations are driven by its statutory obligation to supply a minimum of 300,000 cubic metres per year of high quality eucalypt veneer logs and sawlogs.
- Forestry Tasmania has recently re-negotiated supply contracts with sawmilling customers for approximately cubic metres of Category 1 and 3 logs per year, until 2027. The total contracted supply of these high quality logs represents a reduction from historical levels of supply.
- Forestry Tasmania also has supply agreements with the two Ta Ann facilities, for peeler billets totalling approximately 265,000 cubic metres per year, until 2026/27.
- Harvesting sawlogs and peeler logs creates large volumes of pulpwood. The profitable sale of pulpwood is critical to the profitability of Forestry Tasmania.

This section provides an overview of Forestry Tasmania as an enterprise. It addresses the legislative framework within which FT operates as well as the shareholder interests, its organisational structure and the key elements of its current business model.

## 2.1 Legislative framework

FT was corporatised in 1994 and became a Government Business Enterprise (GBE) with statutory responsibility for the management of Tasmania's State forests. The Ministers with responsibility for FT are the Minister for Energy and Resources (the Portfolio Minister) and the Treasurer. Statutory obligations of the Minister for Energy and Resources are defined under the *Forestry Act 1920* and the *Government Business Enterprise Act 1995*.

FT's objectives under the Government Business Enterprises Act 1995 are to:

- perform its functions and exercise its powers so as to be a successful business by:
  - -- operating in accordance with sound commercial practice and as efficiently as possible; and
  - maximising the sustainable return to the State in accordance with its corporate plan and having regard to the economic and social objectives of the State; and
- perform any other objectives specified in the portfolio Act.



FT's principal functions under the Forestry Act 1920 and subsequent amendments are:

- sustainable production and delivery of forest products and services for optimum community benefit;
- development of a world competitive hardwood and softwood forest resource which is sustainably managed and meets world best practice environmental standards; and
- ensuring the efficient delivery of a range of services including tourism and recreation facilities, education material and scientific research on non-wood production areas of State forest.

The Forestry Act also specifically sets out the legislated requirement for FT to make available for the veneer and sawmilling industries a minimum aggregate quantity of 300,000 m<sup>3</sup> of eucalypt veneer logs and high quality sawlogs.

In addition, FT needs to conduct its forest management functions in accordance with the *Forest Practices Act 1985*, which forms part of a broader legislative and policy framework for sustainable forest management in Tasmania. The Act provides that the *Forest Practices Code* shall prescribe the manner in which forest practices are to be conducted so as to provide reasonable protection to the environment (Forest Practices Board, 2000). FT carries this responsibility for its management of commercial and non-commercial functions across State forests.

The Ministerial Charter (1999) sets out the expectations of FT by the Portfolio Minster and Treasurer. FT requirements are grouped under the four categories of:

- policy expectations;
- nature and scope of operations:
- · financial and commercial management expectations; and
- other requirements.

As FT operates under a portfolio Act as well as the Government Business Enterprise Act, there are some unique aspects of its legislative framework that differ from that of other government entities. This incorporates specific constraints and provisions that relate to its authority and that of the relevant Ministers in setting the business objectives and strategic directions. These particular aspects of FT's legislative framework would need to be considered further in future reviews of the Ministerial Charter for Forestry Tasmania, and relatedly, to further consideration of alternative business models.

#### 2.2 Shareholder interests

FT is a GBE that is wholly owned by the Tasmanian government. Financial dividends generated through FT's operations are returned to the Tasmanian government through the Tasmanian Treasurer. Its shareholders are the Tasmanian public, as represented by the Minister for Energy and Resources and the Treasurer. FT has shareholder reporting obligations, which includes annual reporting that is tabled in Parliament by the Minister.

In February 2011, the Tasmanian government introduced a reform agenda for the operation of GBEs. The reforms are aimed at improving the performance of GBEs through setting clear business objectives and operating constraints, establishing clear trade-offs and requiring greater accountability for delivery of performance targets. There are seven reform principles, comprising:

- · enhanced strategic control:
- improved clarity of objectives;
- improved shareholder return;
- increased productivity and operational efficiency;

- increased scrutiny of capital investments;
- greater accountability; and
- improved transparency.

These reform principles have been incorporated into the consideration of assessment criteria for this strategic review of FT.

In addition to its shareholders, FT interacts with a number of key stakeholder groups with interests in various facets of FT's business. FT has identified its key stakeholders over the period of its current Corporate Plan to be: the Tasmanian government and, in particular, its Shareholder Ministers; its customers; other State and Commonwealth government departments and agencies; employees and contractors; the people of Tasmania; Joint venture participants and business partners; bankers and lenders; suppliers; unions; industry associations; and Environmental Non-Government Organisations (ENGOs).

# 2.3 Organisational structure

FT is governed by a board of directors that is responsible for the corporate governance of the business, including setting the strategic direction; overseeing financial performance and business affairs; setting management goals; and monitoring management performance. The Board comprises five independent, non-executive Directors and the FT Managing Director.

FT business operations are managed through a General Management team, which is led by the Managing Director. An overview of the senior management team structure at August 2011 is presented at Figure 2-1.

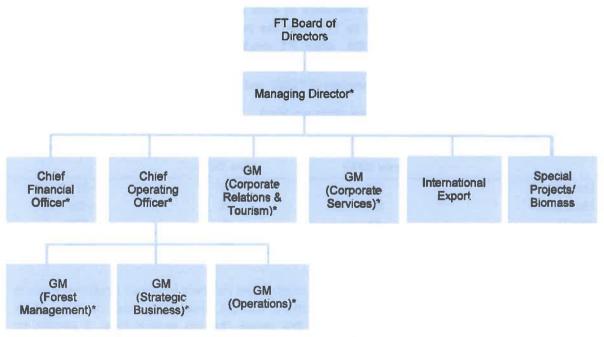


Figure 2-1 Forestry Tasmania senior management structure, at August 2011

Source: FT data (37). \* denotes members of the FT General Management Team.

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A summary of FT's staffing by main reporting lines, as at 30 June 2011, is presented in Table 2-1.

Table 2-1 Forestry Tasmania: FTEs by main reporting lines, at June 2011

Management	Reports	FTEs*
Managing Director	Executive support	3
	<ul> <li>International export sales</li> </ul>	4
	Forestry technical services	1
Chief Financial Officer	Financial services	10
	IT and business systems	9
Chief Operating Officer	Strategic business	2
	Marketing and sales	5
GM Operations	Operations	244
	Huon merchandising yard	13
GM Forest Management	Planning and resources	24
	Forest Research & Development	26
GM Corporate Services	Human resources	11
•	Plant and equipment	15
GM Corporate Relations and Tourism	Corporate relations and tourism	5
	Tahune, Tarkine and Bass eco-centres	6
	Total	380

Source: URS, based on FT data (36); \* FTEs have been rounded.

Table 2-2 presents FT total employment numbers at June 2010 and 2011. It shows that FT has reduced full time equivalent (FTE) staff by 17% over this period. URS understands this reduction follows a trend which began in 2008/09, when FT employed a total of 547 staff (FT 2008). Since 2007, FT has also reduced its use of contract labour, moving from 1,343 in June 2007 to 1,194 in June 2010. This represents an 11% reduction (FT 2007 and FT (b) 2010).

Table 2-2 Forestry Tasmania employment (2010 and 2011)

Employment category	FTE June 2010	FTE June 2011	Change in FTE
Long term	321	259	-19%
Fixed term	126	115	- 9%
Casual	13	6	- 58%
Total employment	460	380	- 17%

Source: FT data (36), rounded.

It is difficult to assess the appropriateness of FT's employment numbers based on forest managers in other jurisdictions because of the different functions that are undertaken and the area under management. However, FT has advised during this review that the optimal level of staffing for effectiveness and efficiency for its current level of operations is considered to be around 350 FTEs. FT plans to move to this level of staffing in the near term by undertaking the following:

- rationalising the structure of the organisation to meet ongoing and changing needs;
- outsourcing functions that can be provided more efficiently by suppliers; and
- recruiting qualified staff to key technical and professional roles to support FT's strategic directions identified in the Corporate Plan.

#### 2.4 Overview of business model

FT delivers its statutory responsibilities through the management of native forests, hardwood plantations and softwood plantations, including the planning, conduct, monitoring and review of operations to access, assess, establish, tend, protect, monitor, conserve and or harvest forests. It also undertakes to maintain supply of forest products and services under negotiated contracts, to businesses in Tasmania, elsewhere in Australia and overseas (Forestry Tasmania 2011).

In addition to these main undertakings, FT engages in the following activities:

- joint ownership of the Taswood Growers softwood joint venture (50% owner with GMO Renewable Resources), through which FT receives revenue from the management of the softwood plantations;
- joint ownership of various other softwood plantation and hardwood plantation joint ventures, e.g. with Plantation Platform Tasmania, Gunns Limited and Norske Skog;
- ownership of Newood Holdings Pty Ltd, which was established to develop new forest industry infrastructure at the Huon and Smithton Wood Centres;
- ownership of Adventure Forests, which is the brand by which various commercial tourism ventures within State forests are promoted by FT; and
- ownership of Forest Technical Services, which provides external consultancy services (Forestry Tasmania 2011).

FT's sustainable forest management performance is independently audited against three certification standards: the Australian Forestry Standard (AS4708); Environmental Management Standard (AS/NZS 14001); and the Occupational Health and Safety Standard (AS4801). These requirements are managed through FT's forest management system (FT(c) 2011).

This Review has not specifically considered FT's sustainable forest management system, beyond its performance in meeting its wood supply commitments, responding to market requirements and opportunities, managing risks, and delivering appropriate returns to Government as owner. However, this Review recognises that FT's forest management system underpins its operational delivery of commercial and non-commercial activities, to meet it statutory obligations and corporate objectives.

#### 2.4.1 Commercial activities

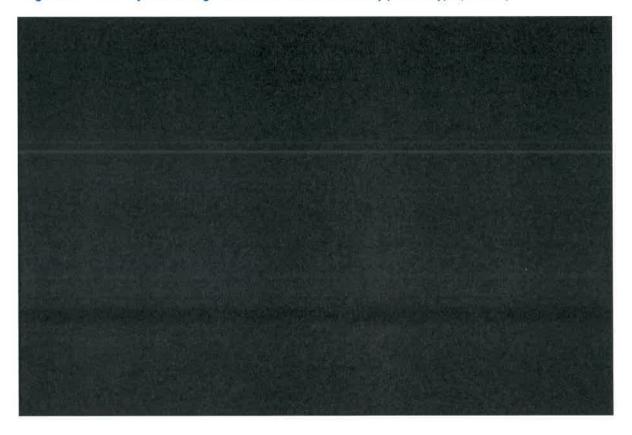
FT's commercial activities comprise an undertaking to maximise the use of all felled trees from harvested areas through the selection of high quality sawlogs (for sawn timber) and veneer logs (for either sliced veneer and peeled veneer products), craftwood and special timbers, with the remainder being available as peeler logs, pulpwood and fuelwood (FT Stewardship Report, 2010/11).

Figure 2-2 shows the relative contribution of each product to FT's gross domestic sales revenue in 2010/11, totalling approximately \$

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Figure 2-2 Forestry Tasmania gross domestic sales revenue by product type (2010/11)



Source: URS, based on FT (1); Note: revenue excludes take or pay invoicing.

The sale of these non-Category 1 and 3 logs is an important driver of the commercial viability of FT. The highest stumpages arise from the Category 1 and 3 logs, and decrease through to the lower stumpages received from the pulplogs. However, increasing the volume harvested in each harvest area serves to reduce unit costs of production, particularly in relation to harvest and transporting costs and FT labour, as well as creating a more efficient use of the capital invested in road construction. FT's most recent sales data reinforces the importance to FT's profitability of the need to maximise sales revenue from its full range of products, particularly lower quality sawlogs and pulplogs.

The current status of FT's supply commitments for its major product categories is shown in Table 2-3. The market outlook for these major product categories is discussed further in Section 4.

Table 2-3 FT supply commitments, at September 2011

Product	Supply commitments
Peeler logs	<ul> <li>FT has signed a 20 year supply agreement with the two Ta Ann rotary peeled veneer (RPV) processing facilities in the north and south of the state, which will expire in 2026/27. The committed contract supply to these two facilities is 265,00m³ pa of peeler billets. This equates to approximately 330,000m³ of peeler logs.</li> <li>As part of its Forestry Innovation Plan, FT is exploring the potential to develop additional domestic RPV capacity around Tasmania. FT anticipates using a similar model used to develop the Ta Ann investment; that is, by first exporting peeler logs and then attracting international investment to establish processing capacity in Tasmania.</li> </ul>
Pulpwood	<ul> <li>Previously, the majority of FT's pulpwood sales were made to Gunns and subsequently exported as woodchip. However, Gunns has announced its withdrawal from all native forest products. This has forced FT to find alternative customers.</li> <li>There are currently two woodchip processing facilities in Tasmania, which are located at Bell</li> </ul>
	Bay. FT has contracts with both of these processors.  In response to these circumstances, FT is currently exploring other options for chipping and exporting, and establishing pulplog export operations. However these are not, to date, supported by contract arrangements.

Source: URS

#### Supply commitments under the TFIA

The TFIA between the Commonwealth of Australia and the State of Tasmania emerged from the broader stakeholder initiative to develop a Statement of Forest Principles for Tasmania. This Agreement was signed by both Governments on 7 August 2011.

In relation to industry supply volumes, the TFIA does not in and of itself mean a significantly different operating environment from the current supply levels for FT. The TFIA guarantees wood supply for the remaining industry (i.e. noting Gunns' withdrawal) of at least 155,000 m³ per year of high quality (Category 1/3) sawlogs and 265,000 m³ per year of peeler billets. FT has advised during the course of this review that based on its resource modelling, the limiting product will be the supply of peeler logs for billets – with production at this level, the supply of high quality sawlogs at current contracted levels can be maintained.

The TFIA does not specify a supply guarantee (or limitation) for the production of pulpwood. Therefore, under this scenario, pulpwood supply is expected to run in line with market access and price-competitive supply capacity, which could be similar to volumes suggested in the Corporate Plan.

#### 2.4.2 Non-commercial activities

FT manages State forests for a range of non-commercial objectives related to environment and biodiversity values as well as the provision of recreation and educational access, in addition to commercial wood production.

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In the years preceding corporatisation, FT received funding for the purposes outlined in Sec 10(2) of the *Forestry Act 1920*. This funding continued for four years following corporatisation; however, it ceased in 1998/99. The amount of funding was highest in 1995/96, when FT received \$3.5 million, but declined thereafter (FT(d) 2011).

The Forestry Act 1920 and related Ministerial Charter provide direction to FT in respect to its functions. These both include functions beyond commercial harvesting only.

In a recent request to the Minister for Energy and Resources (FT(d) 2011), FT sought to identify and quantify the non-commercial activity undertaken in non-commercial forest zones, including formal reserves. FT intends to make a second application in relation to the non-commercial activities inherent in the management of the remaining general forest zone.

The non-commercial forest zone encompassed in FT's application covers 222,000 ha of formal forest reserve and 77,000 ha of special timbers zone forest. FT notes that this area does not include additions to the non-commercial forest zone that are currently presented in the *Statement of Forest Principles*.

Within the 300,000 ha identified, FT performs the following functions:

- land management and protection, including fire, pest and disease protection and control;
- weed management and provision of public access;
- · the delivery of tourism and recreational services, and
- the maintenance and management of supplies of special timbers on a sustainable basis.

In addition, FT provides fire fighting capacity that is deployed across the forested lands across the state in times of fire suppression. FT also completes fire prevention activities to protect its own assets and those of its neighbours.

FT estimates the net costs of managing the non-commercial forest zones to be \$5.7 million per year, after offsetting income and including a profit margin (FT(d) 2011).

At the time of report preparation, a determination on the validity of FT's claim for recognition and funding for the non-commercial activities that it undertakes on behalf of the State has not been made. However, an important consideration in the context of the current project is that if FT were not to provide these services, the Tasmanian government would need to consider an alternative mechanism for providing these services, including consideration of the type and extent of these services desired by the community.

#### Key issues and findings

- Since corporatisation, the area of native forest available for harvest by Forestry Tasmania has been in decline. In contrast, the area of land managed in formal and informal reserves has increased by 90%.
- Employment across the entire Tasmanian forest industry supply change has trended downwards over the past 10 years, and sharply downwards in recent years.
- Significant volumes of hardwood plantation logs are expected to come on stream in the next decade, however, the commercial viability of processing this resource into solid wood products remains unproven.
- The forest industry is undergoing a period of significant change following the impact of the global financial crisis on global markets, and more recently, the decision of Gunns to exit the native forest sector. Since 2008, there have been significant job losses and the loss of many businesses.
- The closure of the Triabunna woodchip export facility and the withdrawal of Gunns from woodchip
  export operations in Tasmania have left the industry with limited options for the sale of pulpwood
  and processing residues and a urgent need to find new customers and markets.

The following section provides a summary of the forest resources available to FT and the industry structure in which it operates. This encompasses a profile of employment across the sector, including staff and contracting arrangements by FT.

# 3.1 Resource supply

Since Forestry Tasmania was corporatised in 1994, the area of native forest available for wood production within State forests has been in decline. In contrast, the area of land managed in formal and informal reserves has increased by 90%.

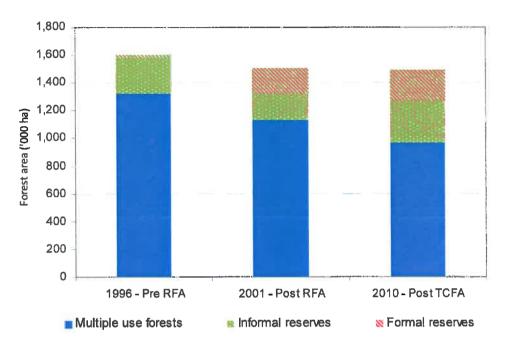
Figure 3-1 identifies three major categories of managed State forest areas: formal reserves; informal reserves; and multiple use forest areas, which includes wood production within native forests and plantation areas. FT distinguishes between formal and informal reserves where formal reserves are those that have been proclaimed by Parliament. However, both formal and informal reserves are zoned for protection under the FT management decision classification.

FT has advised that just under half of the total area of State forests is now available for wood production - that is, approximately 685,400 ha (FT 2010). This includes special timbers coupes, totalling approximately 63,000 ha, and also hardwood and softwood plantations on State forests, totalling approximately 57,800 ha and 57,200 ha respectively.

However, this area excludes native forests areas that are available for wood production but are outside designated coupe planning areas and unlikely to be logged, for reasons that may include low productivity, or they are too steep or otherwise inaccessible for commercial harvesting operations. FT has advised this area of native forest within State forests as at 30 June 2011 that is available but unlikely to be logged is in the order of up to 350,000 ha.



Figure 3-1 State forest areas managed by FT, by forest category (1996 – 2010)



Source: Tasmanian Audit Office 2011;

Note this data relates to State forests only; it does not incorporate native forests on Crown land.

Table 3-1 presents a summary of FT's wood production by major product category over the period 2006/07 to 2010/11. The data shows the decline in the harvest of Category 1 and 3 sawlogs over the past five years and the corresponding decline in native forest pulpwood over this period.

Table 3-1 Forestry Tasmania wood production by major product type (2006 – 2011)

	2006/07	2007/08	2008/09	2009/10	2010/11
High quality sawlog and veneer (m <sup>3</sup> )	307,088	303,951	245,154	210,538	196,702
Low quality sawlog (m <sup>3</sup> )	51,778	87,090	56,613	37,897	48,532
Peeler log (m³)	211,197	209,590	208,334	299,101	431,391
Pulpwood - plantation (tonnes)	126,163	176,703	135,549	179,495	171,205
Pulpwood - native forest (tonnes)	2,136,687	2,230,874	2,005,448	1,388,986	1,376,554

Source: FT (c) 2011

# 3.2 Industry structure and supply chains

Historically, the majority of Tasmania's sawlog resource, both hardwood and softwood, has been processed in Tasmania. The majority of hardwood pulpwood was exported, while softwood pulpwood was primarily utilised in newsprint production in Tasmania, with some volume exported as pulplogs.

An overview of the Tasmania's forest industry structure and supply chains is set out below.

# 3.2.1 Forest management sector

The forest management sector (or 'growing' sector) of the forest industry encompasses those organisations and enterprises involved in managing native forests and plantations for commercial wood production.

From 2006, there has been a downward trend in FTE employment in the growing sector, falling from around 690 to 443 FTE (or by approximately 35%) (Schirmer et. al. 2011). A significant contributor to this decline has been the collapse of large-scale MIS companies such as Great Southern Plantations and Forest Enterprises Australia.

#### Native forest resource

Tasmania's State forests have and continue to provide the primary resource base for the hardwood timber industry in the State. As noted above, just under half of the total area of State forests is currently available for wood production - that is, approximately 685,400 ha.

Prior to the finalisation of the TFIA, FT estimated that over the period 2011 – 2031, native forests available for wood production could provide for an average annual supply of high quality eucalypt sawlogs of 204,000 m³ under a 'base case' scenario (FT(a) 2011). Over the same period, FT estimated that 265,000 m³ of peeler billets and approximately 1,400,000 tonnes of arisings (primarily pulpwood) could be supplied (FT(a) 2011).

Private native forests also provide a significant source of sawlogs and pulpwood in Tasmania. In 2010/11, Private Forests Tasmania (2011) reported that approximately 480,000 tonnes of native forest logs was harvested. The majority (89%) of this harvest was pulpwood, with the balance comprising sawlogs, veneer logs, peeler logs and minor log products.

#### Softwood plantations

In 2009, there were approximately 77,000 ha of softwood plantations in Tasmania, or approximately 25% of the total Tasmanian plantation estate (NPI 2011). The majority of the softwood plantations are radiate pine and around three quarters of softwood plantations are on public land.

Around 45,000 ha of Tasmania's softwood plantations are managed on behalf of Taswood Growers, which is a joint venture between FT and GMO Renewable Resource Ltd. These plantations are managed by an independent third party, Timberlands Pacific Pty Ltd (Timberlands). Norske Skog also manages around 20,000 ha of softwood plantations (of which it owns around 50%).

Sawlogs produced in Tasmania's softwood plantations have been supplied mostly to Gunns' Bell Bay sawmill (built by FEA), as well as supplying a number of smaller mills predominantly located in the north of Tasmania. Pulplogs are primarily supplied to the Norske Skog newsprint mill in Boyer, with small volumes exported as woodchips.

#### Hardwood plantations

In contrast to the softwood plantation industry, the hardwood plantation industry in Tasmania is at a relatively immature stage of development. The majority of the hardwood plantation resource was planted between 1991 and 2005. In 2009, the total area of hardwood plantations in Tasmania was estimated to be 232,000 ha (NPI 2011).

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The primary hardwood planation species is shining gum (*Eucalyptus nitens*), accounting for around 85%, with the balance comprising Tasmanian blue gum (*E. globulus*). The largest hardwood plantation growers in Tasmania are Gunns, FEA (now in administration) and FT.

Most of the private hardwood plantation estate has been established to supply export woodchip markets, via ports at Burnie, Bell Bay and Triabunna (NPI 2006), although this resource could be directed towards the proposed Gunns' pulp mill at Bell Bay. In contrast, the majority of the public hardwood plantation estate, including the FT-managed plantations on State forests, was established primarily to supply the sawlog market (NPI 2006).

The total area of hardwood plantations established on State forests in June 2011 was approximately 52,000 ha. FT owns the majority of this hardwood plantation estate on State forests, comprising approximately 36,700 ha (FT (c) 2011). The balance comprises hardwood plantations established on State forests that are owned by third parties (private sector interests) under leasing or joint venture arrangements with FT.

A significant portion of FT's hardwood plantations have been managed to produce both sawlogs and peeler logs; however, it is not anticipated that significant volumes of sawlogs will be produced until later than 2020 (FT (c) 2011).

Over the period 2004/05 to 2009/10, the average annual volume harvested from hardwood plantations in Tasmania was 1 million m<sup>3</sup> (ABARES 2011). By 2014, it is estimated that the total Tasmanian plantation hardwood pulplog supply could be 2.7 million m<sup>3</sup> per annum (NPI 2007).

# 3.2.2 Forest industry contracting sector

The main contracting businesses involved in the Tasmanian forest industry are those involved in:

- harvest and haulage;
- silvicultural contractors; and
- · roading contractors

A summary of the number of businesses within these broad categories and the relative size (by number of people employed) is included in Table 3-2.

Table 3-2 Profile of businesses within the Tasmanian contracting sector (May 2011)

Type of contracting service	Small site (employing 1 – 19 people)	Medium site (employing 20-99 people)	Large site (employing 100 or more people	Total
Harvest and haulage to mill	85	9	0	94
Silvicultural contracting	53	5	0	58
Roading	~42	~5	0	47
Total	180	19	0	199

Source: Schirmer et. al. 2011.

The contracting sector is currently experiencing a period of significant change, particularly amongst harvest and haulage businesses. This is largely attributed to on-going reductions in business activity and the *Tasmanian Forest Contractors Exit Program* (Schirmer et. al. 2011). The businesses involved in the provision of silvicultural services are also experiencing a decline in employment, which is

attributed to a combination of reduction in investment in second rotation plantations and a lack of investment in first rotation plantations (Schirmer et. al. 2011).

In May 2011, the total number of FTEs employed by the harvest and haulage contracting businesses was estimated to be 770 (Schirmer et. al. 2011). This reflects a reduction of almost 50% from a high of 1,462 FTEs in August 2008. The decline in silvicultural employment over this period was closer to 80%, with current employment estimated to be 139 FTEs.

## 3.2.3 Processing sector

In May 2011, it was estimated that there were 50 wood and wood fibre processing businesses operating across 64 sites in Tasmania. These businesses included sawmills; woodchip mills; rotary peeled veneer mills; pulpmills; and downstream processing businesses (Schirmer et. al. 2011). The number of processor sites and respective input material are presented in Table 3-3. It shows the processing industry is largely dominated by small to medium sized employers, with the majority utilising native forest inputs. There are currently no businesses that specialise in processing hardwood plantation, exclusively.

Table 3-3 Tasmanian processing sites by type of inputs utilised (May 2011)

Input	Small site (employing 1 – 19 people)	Medium site (employing 20-99 people)	Large site (employing 100 or more people	Total
Native forest	33	13	1	47
Softwood plantation	1	2	1	4
Hardwood plantation	0	0	0	0
Native forest and softwood and hardwood plantation	4	5	1	10
Total	41	20	3	64

Source: Schirmer et. al. 2011.

Table 3-4 presents a breakdown of the processing sites by the type of processing undertaken. It shows that most businesses are engaged in sawmilling (green or dry, or both), and of these, most employ less than twenty people.

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Table 3-4 Tasmanian processing sites by type (May 2011)

Type of processing	Small site (employing 1–19 people)	Medium site (employing 20-99 people)	Large site (employing 100+ people)	Total
Woodchip mills <sup>2</sup>	2	2	0	4
Sawmills – undertaking green milling only	13	5	0	20
Sawmills – undertaking both green and dry milling (and some also retailing)	17	3	0	20
Processors undertaking both sawmilling and downstream processing	2	3	1	6
Processors undertaking downstream processing only (e.g. mouldings)	3	5	1	9
Post/pole production	2	0	0	2
Veneer production	0	3	0	3
Processors undertaking pulp and paper production	0	0	1	1
Total	39	21	3	63

Source: Schirmer et. al. 2011.

A significant change in the composition of the processing sector capacity has been the Gunns decision to cease operations reliant on native forest input. This decision has led to either temporary or permanent closures of its sawmilling and woodchipping facilities across the State. Some of these facilities have been sold, notably the woodchip mill at Triabunna and the Huon sawmill at Southwood. Others are in the process of being sold to third parties.

Gunns is currently in the process of seeking financial backing to construct a pulp mill at Bell Bay. The proposed pulp mill would only take hardwood plantation resources and it is estimated it could consume the majority if not all of Tasmania's plantation pulplog production. Gunns (undated) has estimated that it will create 3,100 additional full time positions (direct and indirect) every year.

If Gunns is successful in obtaining financial backing and environmental permits, the project will have a significant effect on the structure of the Tasmanian forest industry, particularly given its reliance on plantation resource.

<sup>&</sup>lt;sup>2</sup> Includes Triabunna woodchip mill, which is currently closed.

#### Key issues and findings

- Forestry Tasmania produces multiple products and operates in multiple markets.
- Japanese demand for wood fibre is anticipated to continue to reflect increased preference for
  plantation wood fibre. The most likely market for Forestry Tasmania's native wood fibre supply is
  China, however, prices are unlikely to reach those previously achieved in the Japanese market.
- The sawntimber market is currently primarily driven by local demand. With demand for higher value appearance products likely to grow nationally and supply of native forest resources declining, there may be opportunities for the Tasmanian native resource, especially in relation to the Australian alterations and additions sector.
- With the development of domestic rotary veneer processing capability, Forestry Tasmania's log
  exports had ceased. However, Forestry Tasmania's current strategy relies on log exports to
  supplement its domestic customer base and to build broader market interest in Tasmanian wood
  and attract processing investment to the State.
- It is expected that opportunities for log exports will continue, with markets remaining strong but volatile. However, log export markets represent a higher risk market opportunity for Forestry Tasmania.
- Tasmania's distance from markets in Asia, exchange rate variability and shipping costs will
  continue to be key drivers for export supply competitiveness.

This section outlines key markets for the Tasmanian forest and wood products industry, based on Forestry Tasmania's native forest and emerging hardwood plantation resources. Key markets for FT's hardwood log products, harvested from native forests and FT's emerging hardwood plantation resources, comprise:

- woodchips and pulplogs, primarily for export markets;
- log exports for veneer manufacture and other applications; and
- sawntimber, for the domestic timber industry.

This review of key markets excludes specific consideration of FT's supply of peeler logs (classified as pulplogs or others) for rotary peeled veneer manufacturing within Tasmania, through the existing Ta Ann facilities. This is due to:

- the end market for this supply of peeler logs to Ta Ann is broadly the same market as that for log
  exports of logs for veneer manufacture in Asia. FT supplies peeler logs (converted to peeler billets),
  which are processed into veneer sheets that are exported for a range of further manufacturing
  operations offshore, for example, the manufacture of laminated veneer lumber or structural ply
  products, for use in industrial floors). While the Ta Ann supply arrangements feature domestic
  processing within Tasmania, there is no separate market for the FT products currently in Tasmania
  or in Australia; and
- FT's intent, through the Corporate Plan and the Forestry Innovation Plan, to expand the production of rotary peeled veneer manufacturing within Tasmania is discussed later in this report in the context of the outlook for FT.



This review of key markets also excludes specific consideration of sliced veneer for decorative and other purposes. FT has segregated and supplied high quality veneer logs for sliced veneer operations. However, this supply has been relatively small compared with the supply of logs to key markets, and processing capacity in Tasmania has been reduced in recent years. FT has made no specific provision for maintaining (or expanding) its supply of high quality veneer logs to industry under the current Corporate Plan.

# 4.1 Woodchips and pulplogs

The focus of this section is the hardwood wood fibre market, including woodchips and pulplogs. These products are currently largely utilised in international markets, so the following sections assess demand trends in the key Australian export destinations of the Pacific Rim: Japan and China.

#### 4.1.1 Demand

Figure 4-1 shows the volume of Australian hardwood woodchips exported by destination and highlights the importance of Japanese and Chinese demand. Between 2000 and 2008, the quantity of Australia's hardwood woodchips exports increased at an average rate of 8% per annum, due to both the maturation and harvest of extensive hardwood pulpwood plantations and also the establishment of RFAs, which facilitated the export of woodchips from native forests. Since 2008, exports have declined largely due to the impact of the global financial crisis (GFC) on the Japanese economy and a change of preference by the Japanese pulp and paper industry.

6.0 4.0 Million BDMT 3.0 2.0 1.0 0.0 666 2000 2002 2003 2004 2006 966 1997 866 200 China Other Taiw an Japan

Figure 4-1 Australian hardwood woodchip exports by destination (1995 – 2010)

Source: Global Trade Atlas

#### Japan

Over the last 20 years Japan has been the dominant source of demand for hardwood chip exports in the Pacific Rim. Following expansion of imports in the 1990s, largely as a result of replacement of domestic forest supplies, Japanese imports were relatively stable through the past decade.

Overall paper and paperboard production in Japan has been relatively stable over the last decade. The Japanese industry is primarily oriented towards domestic sales. Japanese producers are significantly protected by a number of non-tariff barriers that limit competition from imported paper supplies. This has allowed the Japanese pulp and paper industry to rely on imported fibre and to pay higher prices for woodchips than other woodchip importing countries. As a result of its reliance on imported fibre, the cost of pulp and paper manufacture in Japan is greater than in other countries and limits its capacity to export product out of Japan.

As a consequence of the GFC, Japan's gross domestic product (GDP) fell by -5.2% in 2009 (IMF, 2010). This reduction in economic activity resulted in a decline in the production of printing and writing paper of around 21% (Figure 4-2).

The decline in paper production impacted both Japanese domestic pulp production, which primarily relies on imported woodchips and the volume of imported pulp. Imported Australian hardwood woodchip are largely used in the production of printing and writing paper grades, however Figure 4-3 shows that all paper grades declined substantially post the GFC.

Figure 4-2 Japanese paper and paperboard production by type (1990 – 2010)

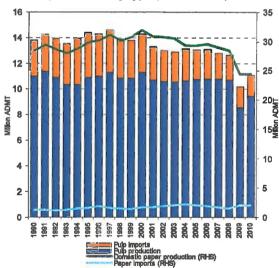
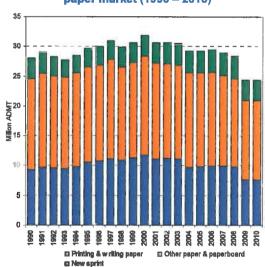


Figure 4-3 Wood fibre supply to the Japanese paper market (1990 – 2010)



Source: FAOSTAT

Source: FAOSTAT

NB: 'Wood Pulp' includes hardwood and softwood fibre

The Japanese market has a preference for plantation woodchips due to higher and more consistent pulp yields from plantation species, and the perception amongst consumers that plantation forestry is more environmentally sustainable. As a result, demand for certified plantation resources is growing in this market.

Japan relies predominantly on imported hardwood wood fibre to supply its pulp production sector. Figure 4-4 shows the volume of Japanese hardwood woodchip imports since 1994. Up to 2008,

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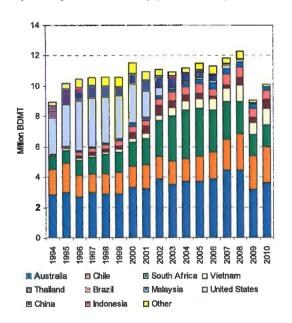
annual Japanese hardwood woodchip imports had increased from approximately 9 million bone dry metric tonnes (bdmt) to 12 million bdmt, meaning Japan effectively controlled around 85-90% of the international trade of hardwood woodchips, providing it with a relatively high degree of certainty in respect to both the volume and price of the product.

In 2009, when domestic paper production fell, the demand for hardwood woodchip imports also declined substantially, with imports declining by more than 20%, and showed only a minimal improvement in trade in 2010. Australia continues to be a major supplier to this market, a position it has consistently held for over two decades.

Figure 4-5 shows the annual volume of wood pulp imports by source country. Japan's consumption of imported wood pulp has trended downward since 1994, largely due to an increase in the use of recycled fibre. As historic levels of paper production declined slightly over the last decade (Figure 4-2), paper producers have reduced the volume of pulp they import and concentrated more on purchasing pulp from domestic producers. While wood pulp imports increased by 9% in 2010, this fits within the long term downward trend that has occurred over the past 15 years.

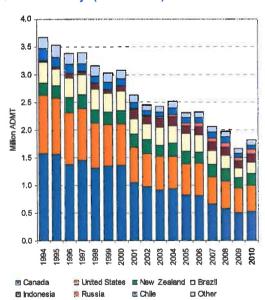
Japanese pulp mills have developed to supply the trade-protected domestic paper sector and, as such, tend to have high cost structures and limited ability to be competitive in the international pulp market. Future green-field development of pulp mills by Japanese companies is likely to be offshore in other parts of Asia, closer to large scale plantation resources and well placed to supply a range of markets with cost competitive products.

Figure 4-4 Japanese hardwood woodchip imports by source country (1994 – 2010)



Source: Global Trade Atlas

Figure 4-5 Japanese wood pulp imports by source country\* (1994 – 2010)



Source: Global Trade Atlas

\*NB: The above graph includes pulp manufactured from

hardwood and softwood fibre

#### China

China has been the world's largest producer of paper since 2008 when it overtook US production output. In 2010, China produced over three times the amount of paper that Japan produced, producing more than 23 million tonnes of printing and writing paper alone (Figure 4-6). Since 2000, the growth of paper production in China has increased almost three fold, despite the international impact of the GFC.

Historically, China has relied on non-wood fibres and low quality domestic sources of wood fibre, and generally produced a lower quality paper product. New paper production facilities are producing higher quality products and therefore more dependent on wood fibre as a source. The initial response from the Chinese industry was to secure this supply in the form of in imported wood pulp, and rapidly became the dominant importer of market pulp. This also meant China imported relatively small volumes of woodchip in the early part of the past decade.

Since 2000, Chinese paper production has grown particularly fast, resulting in corresponding growth in demand for both imported market pulp and increase in domestic pulp production (Figure 4-7). In absolute terms, there is a gap between wood feedstock supply and paper production in China – this reflects the large role that recycled paper and non-wood fibre (e.g. straw, bagasse) play in Chinese paper production.

Figure 4-6 Chinese paper and paperboard production by type (1990 – 2011)

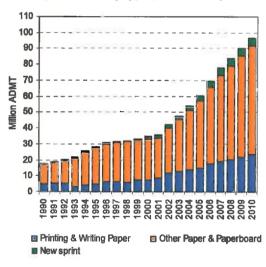
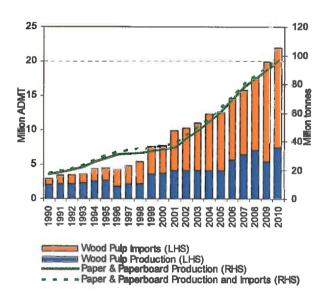


Figure 4-7 Chinese wood pulp supply (1990 -2010)



Source: FAOSTAT Source: FAOSTAT

A relatively small<sup>3</sup> but fast growing proportion of Chinese pulp production has been supplied by internationally sourced hardwood woodchips. This import trade has risen dramatically over the past three years in response to new pulp mills seeking increased volumes of wood fibre of adequate quality to meet their requirements. The volume of imported woodchip into China is now in excess of 50% of the Japanese trade.

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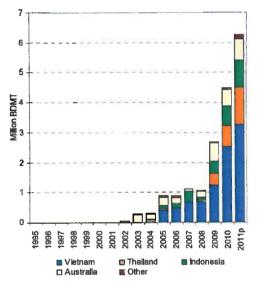
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<sup>&</sup>lt;sup>3</sup> URS estimates that currently around 10-15% of Chinese domestic pulp production is fed by internationally sourced hardwood chips (FAO; www.ruraltech.org).

Vietnam has supplied the majority of woodchip demand to date, being sourced from hardwood plantations; however, since 2009 Australia has increased its share of the market (see Figure 4-8). Critically to Australia, there is substantial uncertainty in the capacity of Vietnam to continue supplying at its current level.

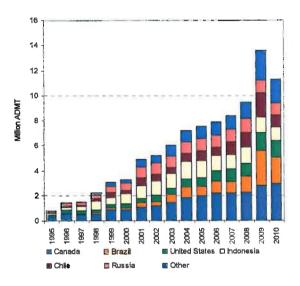
In addition to woodchip imports, China utilises an increasing volume of wood pulp. Figure 4-9 shows China's wood pulp imports since 1995. In line with China's rapid growth in demand for a range of pulp and paper products, wood pulp imports have increased by an average of 12% per year. The majority of these imports have been sourced from Canada and Brazil to date. This supply is used by the increased capacity of paper production in China, and particularly in production of printing and writing papers.

Figure 4-8 Chinese hardwood woodchip imports by source country (1995 – 2011p)



Source: Global Trade Atlas; \*p - projected annual imports, on YTD import data

Figure 4-9 Chinese wood pulp imports by source country (1995 – 2010)



Source: Global Trade Atlas

\*NB: These data contain hardwood and softwood wood pulp imports

As Figure 4-10 shows, China is a substantial exporter of printing and writing paper, on the back of a large expansion of production capacity, which is well in excess of Chinese domestic demand. Japan, Hong Kong and South Korea are China's three largest markets, accounting for 25% of China's total production in 2010. A significant portion of these exports would rely on imported wood pulp or high quality domestic pulp production utilising wood sources including woodchip imports. The printing and writing paper grade is a highly competitive market with a number of established global producers and established product standards. A number of nations, most notably the United States have recently accused China of dumping surplus volume at below cost as a method of securing sales of this exported volume.

3.5 3,0 2.5 2.0 1.0 0.5 0.0 998 666 000 2002 2003 2008 003 2004 2005 2006 2007 997 Asia ■ Middle East Europe ■ North America South America Oceania

Figure 4-10 Chinese exports of printing and writing paper (1995 – 2010)

Source: Global Trade Atlas

Growth in Chinese pulp production capacity is expected to slow from an average of one million tonnes per annum (experienced over 1999 - 2009) to around 500,000 tonnes per annum over the 2010 - 2014 period (Hawkins Wright, 2010).

China's ongoing developments in pulp production capacity will most likely result in a substantial further increase in demand for hardwood woodchip imports. Where possible, China will continue to source low cost woodchips from the Asia-Pacific for these mills. However, the price of woodchips from current suppliers will be influenced by pulp industry developments in these countries, particularly in the case of Vietnam and Indonesia where a number of greenfield developments are proposed, as well as declining resource availability and uncertainty in supply levels. Constraints in supply from these countries are expected to place upward pressure on prices and leave Australia in a stronger position as a key woodchip supplier.

# 4.1.2 Prices

Generally, woodchips are traded internationally in US dollars, with the Japanese woodchip market being traded by suppliers such as Australia on a free on board (FOB) <sup>4</sup> basis as distinct to on a delivered basis (CIF - Cost, Insurance and Freight<sup>5</sup>). In the case of the Japanese market, Australia is an exception with respect to currency and trades directly in Australian dollars on an FOB basis. As a result, the Australian woodchip (FOB and resultant CIF) price often exhibits different price trends to those countries trading in US dollars.

risk but includes delivery to a port of export and loading onto a vessel where relevant.

The Cost, Insurance and Freight price of an internationally traded good is the price of producing and delivering the good to the buyer's port of destination, inclusive of insurance, freight and other delivery costs.

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<sup>&</sup>lt;sup>4</sup> The Free on Board price of an internationally traded good is the price of producing and delivering a good up to the point of loading on delivery transportation to the buyer. An FOB price therefore excludes freight, insurance costs and foreign exchange risk but includes delivery to a port of export and loading onto a vessel where relevant.

As noted above, the traditional trade of Australian hardwood woodchip has been to Japan, with only small volumes traded recently sold to China. The price of Australian hardwood woodchip exports to Japan increased steadily in nominal terms from 2000 to 2008, reaching a high in 2008, with FOB prices of \$A185/bdmt for native woodchip and \$A207/bdmt for *E. globulus* plantation woodchip. Plantation woodchips have typically attracted a price premium of around 10-12% due to their higher pulp yield, which allows cost savings for pulp production. These prices have been maintained in nominal terms since 2009 and 2010, despite the GFC market downturn. Figure 4-11 and Figure 4-12 illustrate price movements for native and plantation woodchips since 1990 in nominal and real terms respectively. Since 1990 hardwood woodchip prices have trended down in real terms, however, this has moderated since 2001.

Figure 4-11 Nominal FOB price of hardwood woodchip, Australian ports to Japan (1990 – 2010)

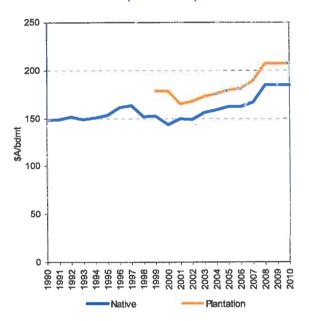
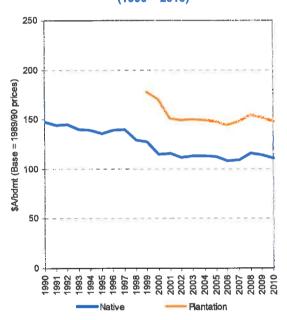


Figure 4-12 Real FOB price of hardwood woodchip, Australian ports to Japan (1990 – 2010)



Source: URS
NB: Plantation data is not reliable prior to 1999 owing to small volumes sold

Source: URS NB: Plantation data is not reliable prior to 1999 owing to small volumes sold

The stability of the FOB price since 2008 suggests that downward pressure on price from Japanese customers is tempered by other factors. These factors include the threat of losing market share to China or domestic pulp mills. The Japanese industry also strongly values the commercial relationships it has with Australian hardwood woodchip suppliers and has a long-term interest in encouraging ongoing plantation investment in Australia for direct supply to Japanese markets.

The relative competitiveness and long term price trends of Australian hardwood woodchips (in US dollars) are shown in Figure 4-13. As the Australian dollar strengthens against the US dollar, Australian hardwood woodchips become more expensive relative to other producers and less cost-competitive as a fibre source for Japanese buyers. The appreciation of the Australian dollar since early 2009 has decreased Australia's competitiveness in US dollar CIF terms.

A comparison of CIF prices in Japanese yen indicates that Australian prices have been relatively flat over the past three years as the Japanese currency has held its value better than the US dollar. However, given Australia is currently the highest cost supplier to the Japanese market, there is likely to be pressure for Australian exporters to lower prices to more closely align with their international competitors.

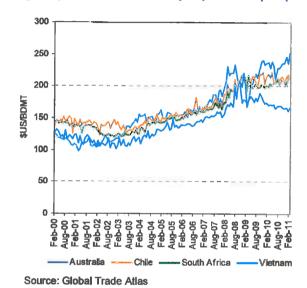


Figure 4-13 Monthly CIF price of hardwood chip exports to Japan (USD, 2000 – 2011)

The Australian trade to China is still evolving, and some Australian trades are being done in USD and on a delivered (CIF) basis.

China consumes a smaller quantity of international hardwood woodchips than Japan, with demand below half of Japan's volume in 2010. On average, Chinese buyers pay substantially lower prices for hardwood woodchips than Japanese buyers and import predominantly from the immediate South East Asian region. Chinese buyers appear to more readily import Australian native woodchips, whereas Japanese buyers are showing declining preference for this supply.

Figure 4-14 shows the quarterly average CIF price trends in US dollars for major countries supplying China. In December 2010, the average CIF price of Australian woodchip exports to China was around US\$197/bdmt. This price represents a significant premium to the average delivered woodchip price to China between 2006 and 2010, which was around US\$150/bdmt – approximately 28% less than the equivalent Japanese price.

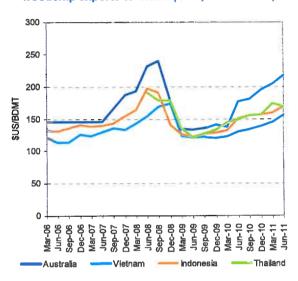
Furthermore, Figure 4-14 shows that Australia is a relatively high-cost supplier to China. In December 2010, Australian woodchips sold for considerably higher prices than competing sources. The sharp rise in the price of Australian woodchips from March 2010 reflects the rapid appreciation of the Australian dollar against the US dollar during this period. Prices have been robust since March 2010 – developments in the Chinese pulp production sector, including the commissioning of the new APRIL mill in Rizhao in June 2010, have strengthened wood fibre demand.

Figure 4-15 shows the historic price of Chinese hardwood pulp imports from a range of major supplier countries. The price of pulp imports fell dramatically during the GFC as a result of weakening

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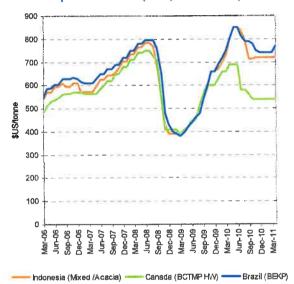
international demand for pulp. Pulp prices have since recovered to a pre-GFC high; however, they have begun to soften recently as a result of weakening demand for paper products in Europe and North America.

Figure 4-14 Quarterly CIF price of hardwood woodchip exports to China (USD, 2006 – 2011)



Source: Global Trade Atlas

Figure 4-15 Monthly CIF price of hardwood pulp exports to China (USD, 2006 - 2011)



Source: Hawkins Wright, 2011

NB: BCTMP, Bleached Chemi-Thermo Mechanical Pulp Hardwood; BEKP, Bleached Eucalyptus Kraft Pulp

Figure 4-14 and Figure 4-15 show there is a degree of correlation between pulp prices and China's imported woodchip price. The recent strength in pulp prices has supported China's ability to pay higher woodchip prices. Recent trade shows that in February 2011 bleached eucalyptus kraft pulp (BEKP) could be produced in China at a cost of 5,250 RMB per tonne (Hawkins Wright, 2011). This is significantly cheaper than from imported sources that are estimated to cost 6,205 RMB per tonne, based on average international prices (Hawkins Wright, 2011). However, the increase in pulp prices then makes Chinese paper exports less competitive relative to other paper exporting nations. This places an upper limit on the price of China's imported pulp and woodchips.

Based on the current demand and price conditions, the key market drivers for the export wood fibre market include the international pulp price and the cost of alternative supply of imported woodchip.

As with any international trade, the cost of shipping affects Australia's competitiveness. In addition, exchange rate movements have significantly influenced the relative competitiveness of Australia's export wood fibre. This is less relevant in the Japanese market because contracts tend to be specified in Australian dollars.

#### 4.1.3 Outlook

A summary of the market outlook for woodchips and pulplogs is set out in Table 4-1. Over the next five years the availability of plantation-grown pulpwood from Australia is expected to increase substantially as the MIS plantations mature and be ready for harvest. This supply has the potential to more than double Australia's traditional trade of the early 2000 period.

Japan is expected to continue to consume the majority of hardwood woodchip produced by Australian plantations. However, the anticipated lack of significant economic growth in the Japanese economy over the next 5-10 years will limit longer term growth in woodchip demand.

URS estimates that Australia's total export volumes of hardwood woodchips to Japan are likely to be around 5 million bdmt per annum over the next five years. This is based on total Japanese hardwood woodchip imports returning to 10-11 million bdmt and Australia being able to maintain an approximate 45% market share. This should leave Australia in a relatively strong position to improve its market share, but to be competitive, this additional share may have to be realised at a lower price.

The Gunns pulp mill may be a new market for Australian plantation woodchips if the project goes ahead. In this event, the majority if not all of Tasmania's hardwood plantation woodchip supply could be utilised by this pulp mill from around 2013/14, as well as supply from the mainland.

If the Gunns pulp mill is not commissioned, a significant plantation supply surplus of over 2 million bdmt is anticipated for the next 3-6 years and alternative markets will need to be sought. While the Chinese market is likely to have the capacity to consume the additional wood fibre supply, it is likely woodchips sold to this market will attract a significant price discount to the Japanese market.

Current Chinese prices do not provide an adequate return to Australian plantation owners, and Chinese buyers would be under pressure to lift prices, particularly as their woodchip demand continues to increase. Native forest woodchip sales are commonly a function of an integrated timber harvesting operation, and therefore have a higher degree of pricing flexibility relative to plantation pulpwood owners who need to receive a price that provides them a return on their investment. The rate at which Chinese woodchip prices rise will be influenced by a number of factors, including prices of alternative fibre sources of both woodchip and global market pulp.

Table 4-1 Summary of market outlook for woodchips and pulp logs over time

## Year Outlook 2012 Continued reduction in Japanese demand for native forest wood fibre, coupled with an increase in demand for plantation wood fibre. The overall volume of wood fibre consumed by Japan is not likely to increase beyond historically high levels. Downward pressure on real prices is likely to continue. Chinese growth in demand for wood fibre is likely to continue to increase and has the potential to consume large volumes of Australian native woodchip and pulplogs; however, prices currently provide low stumpage to Australian growers. Upward pressure on prices will emerge as China seeks to secure increasing volumes. 2017 Australian plantation hardwood supply is expected to peak. Japanese are expected to have largely transitioned out of Australian native woodchip, but is unlikely to consume all of Australia's plantation wood fibre. Chinese demand for wood fibre is likely to continue to be strong, but the viability of this market for Australian growers will be conditional on continued high pulp prices and on achieving agreement on a price that provides adequate stumpage to growers. If the Gunns pulp mill is commissioned before this date, it could consume the majority if not all of Tasmania's plantation wood fibre. If the Gunns pulp mill is not commissioned then a market for considerable additional volumes of plantation woodfibre will need to be found. 2022 Australian plantation hardwood supply declining. Demand from China expected to remain high, and sustainability of supplies from other countries will be tested.

Source: URS



#### The implication for FT includes:

- over the period 2011 2031, it is estimated the average annual volume of plantation arisings (primarily pulpwood) will be approximately 220,000 gmt (FT (a) 2011). Over the period 2031 2050, this volume is estimated to increase to an average of around 420,000 gmt per annum (FT (a) 2011). There are a number of potential markets for this resource, including Japan and China;
- Japanese demand for wood fibre is anticipated to reflect increased preference for plantation wood fibre. Access to this market may be limited by the volume coming from other Australian suppliers. Access to the market will also be limited by Tasmanian processing capacity;
- the most likely market for FT's native wood fibre supply is China, however prices are unlikely to reach those previously achieved on the Japanese market, but they will need to rise to secure adequate volumes; and
- the Japanese wood fibre price may trend downward towards the Chinese price (but expected to remain higher because Japanese processors typically have a greater capacity to pay).

# 4.2 Log exports

Log exports encompass pulplogs that are exported in log form and subsequently processed into rotary peeled veneer or low grade timber products.

FT has exported relatively small volumes of logs over several years, partly as a method of attracting processing investment in Tasmania. With the establishment of rotary peeled veneer manufacturing facilities in Tasmania in the past five years, FT has over this period directed peeler grade logs that would otherwise have been exported to the two Ta Ann facilities.

However, FT is currently undertaking to export a substantial volume of hardwood logs as part of its Corporate Plan to build market interest in Tasmanian wood and as a key market to supplement its domestic customers.

#### 4.2.1 Demand

Japan was historically the largest importer of hardwood logs in the Asia-Pacific region, which were utilised primarily in its domestic hardwood plywood industry. However, the Japanese plywood industry has moved to softwood primarily and Japan now imports relatively small volumes of hardwood sawlogs.

China is now the world's largest importer of logs, currently importing over 20 million m<sup>3</sup> annually of softwood logs and around 10 million m<sup>3</sup> of hardwood logs (GTIS 2011).

China's hardwood log import volumes have increased rapidly over the last decade. Figure 4-16 presents this trend and the range of major supplier countries. This rapid growth in imports fell following the GFC in 2008 - 2009 and China has been able to secure extra supply of softwood logs since that time. However, based on China's continuing economic growth and broader industry trends, it is likely that import demand for hardwood logs will resume its trend of upward growth.

Figure 4-16 Volume and source of hardwood log imports by China (1995 – 2010)

Source: GTIS

International trade in hardwood logs is based mostly on the harvest of tropical native forests from South East Asia, in particular Malaysia, Papua New Guinea (PNG), the Solomon Islands, Myanmar and some African countries, such as Gabon (FAOSTAT 2006). The relative importance of Indonesia and Malaysia as hardwood log exporters has declined over the last ten years as supplies from tropical forests have reduced and as a result of log export bans, while there has been increasing supplies from the South Pacific (particularly PNG and the Solomon Islands) and Africa.

It is difficult to obtain substantive data on trade in plantation hardwood sawlogs but it is small globally. For example, there is some export of plantation hardwood logs from the Solomon Islands and some plantation logs exported from PNG but volumes are relatively small in regional terms.

## 4.2.2 Prices

Hardwood log prices vary significantly among exporters and can be volatile because the export log market tends to exhibit commodity traits. As Australia has typically not traded in this market, it is difficult to obtain price data specific to Australian hardwood species. However, price data on tropical hardwood sourced from native forests such as Meranti and Keruing is readily available and presented in Figure 4-17 below.

The trend in recent years has been for increasing prices for hardwood log exports. This largely reflects increasing scarcity of native forest hardwood logs but also increasing demand from China. In addition, during the early part of last decade, Russia emerged as the major supplier of both hardwood and softwood logs to China. Through the latter part of the decade, Russia began to impose an excise duty on their log exports, as a way of encouraging domestic processing of the log. This Russian policy also outlined very substantial future increases of the excise duty. This action resulted in a marked increase in all log exports, and China then diversified their supply away from Russia as a way of maintaining supply.

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The implementation of this excise duty policy is now under consideration by the Russian Government, as part of their application to the World Trade Organisation (WTO). A reduction of this duty, in line with WTO requirements, has the potential to result in a return of Russian exports of historical volumes, which may deflate global prices.

As with all forms of international commodity trade, the location of alternative suppliers, exchange rate variability and shipping costs will continue to be key drivers for Australian supply competitiveness. Figure 4-18 shows average freight rates over the period 2000 – 2011, coupled with the Baltic Dry Index<sup>6</sup> for the period 2003 – 2011. Both measures indicate the volatility in the cost of international shipping over the past decade. This is illustrative of the risks associated with log exports, particularly for supplier entities that bear the cost of exchange rate movements and shipping costs over time.

Figure 4-17 Indicative prices for hardwood logs on international markets (2003 – 2011)

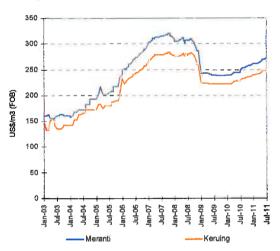
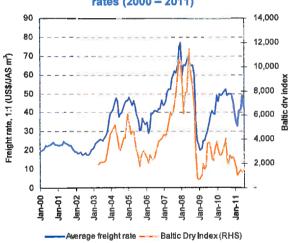


Figure 4-18 Baltic dry index and average freight rates (2000 – 2011)



Source: ITTO Source: URS, derived from Hawkins Wright

## 4.2.3 Outlook

A summary of the market outlook for log exports is set out in Table 4-2. It is expected that international markets will provide opportunities for hardwood log exports in coming years. Chinese demand for log imports will continue to rise on the back of increased consumption of a wide range of timber products. Declining supplies of high value hardwoods from tropical countries and the growing acceptance of plantation resources internationally is expected to create market opportunities for the export of hardwood logs.

Uncertainty regarding the continuity of the Russian supply should be expected to influence price and volume volatility across the log export markets. In this context, log export markets represent a higher risk market opportunity for Forestry Tasmania that domestic sales. Furthermore, Tasmania's distance from markets in Asia, exchange rate variability and shipping costs will continue to be key drivers for export supply competitiveness.

<sup>&</sup>lt;sup>6</sup> The Baltic Dry Index is an index that tracks worldwide international shipping prices of various dry bulk cargoes.

Table 4-2 Summary of hardwood log export market outlook over time

Year	Outlook
2012	<ul> <li>Growth in Chinese demand for log Imports is likely to continue. This market will be highly competitive and show volatile pricing because of the commodity features of log export market. The market will be influenced by a number of factors including policy positions such as the Russian log export excise duty.</li> </ul>
2017	<ul> <li>Traditional hardwood log export suppliers are likely to be under pressure due to sustainability concerns. Chinese demand is likely to remain strong and China will seek to secure both hardwood and softwood supplies to satisfy this demand.</li> </ul>
2022	<ul> <li>Chinese demand is likely to lead to on-going questions about the sustainability of traditional hardwood log exporters</li> </ul>

Source: URS

The implications for FT are:

- log export markets will remain strong but it is likely to be a volatile market;
- provided that local processing capacity remains internationally competitive, log export markets are likely to represent a higher risk market opportunity for FT, requiring specialist management expertise and potentially higher costs for managing transactions; and
- increasing volumes of plantation hardwood sawlogs will become available as FT's plantation estate
  matures and these logs may present a resource for potential log export. However, it is possible
  they can be directed to the domestic industry for processing, on preferable terms of trade for FT.

## 4.3 Sawntimber

The Australian softwood sawntimber market dominates the domestic structural timber market. However, in the future, Australian softwood sawntimber production is likely to level off as a consequence of a flattening availability of additional softwood sawlog woodflow. Future growth in softwood sawntimber demand is unlikely to be met from domestic production and will need to be met by imports. The focus of this section is therefore on the market for domestic hardwood sawntimber, including Tasmania.

## 4.3.1 **Demand**

Apparent consumption of hardwood sawn timber in Australia has declined by an average of 2.4% per year since 1984/85 (Figure 4-19). This has been associated with the increase in softwood sawntimber as well as the impact of restrictions on harvesting of public native forests. The implementation of RFAs and other State government policies has resulted in ongoing reductions in sustainable yields from native forests.

Imports account for about 11% of Australia's hardwood sawn timber consumption (ABARES, 2011). Malaysia and Indonesia are the largest sources of hardwood sawn timber imports into Australia.

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2,500 1,500 1,000 1,

Figure 4-19 Hardwood sawn timber production and consumption trends (1984 – 2009)

Note: Production data for 2006/07 was derived from a new sawmill survey undertaken by ABARES and are not directly comparable with previous years.

Source: ABARES 2009

As softwood has captured the house framing market, hardwood sawntimber production in Australia has generally been directed to higher value strength applications (for example, large beams, lintels and stair treads) and appearance grade uses (particularly flooring). Hardwood products used in strength applications are facing increasing competition from engineered wood products, such as laminated veneer lumber (LVL) and consequently it is expected that hardwood products will move out of strength applications to higher value, appearance-based markets such as flooring and furniture.

The move to higher-value appearance grades has seen alterations and additions become a more important driver of demand for hardwood sawntimber, while the relative importance of housing commencements has declined. The value of alterations and additions in Australia shows consistent growth over time (Figure 4-20); however, the value of additions and alternations in Tasmania over the 2000 – 2010 has been stable at around \$30 million each quarter.

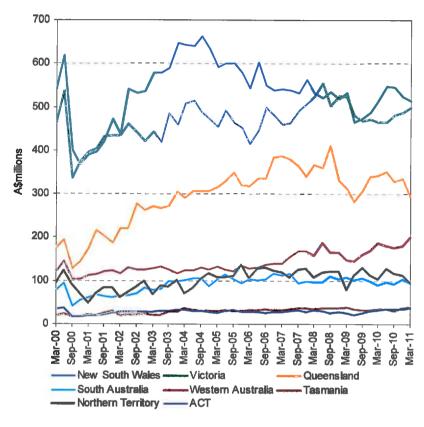


Figure 4-20 Value of Australian residential alterations and additions (quarterly)

Source: ABS 2011

Whilst trends suggest increasing use of hardwood logs for strength purposes or appearance products, it is not uncommon for Australian hardwood sawmills to have established markets for green sawn timbers. In these cases, sawmills tend to be competitive suppliers of structural grade material to local markets.

The other trend apparent across Australian hardwood sawmills is process specialisation for a particular product. For example, some sawmills specialise in purchasing lower grade (lower cost) hardwood and producing lower value products such as tile battens. There are examples of such sawmills that have maintained this business model at relatively small scales of production.

Declining volumes of native forest sawlogs and strong markets for hardwood appearance products suggest opportunities may exist for hardwood plantation logs. The ability of plantation sawntimber to compete in higher value hardwood sawntimber markets will largely depend on the quality of the sawlogs produced, which is influenced by genetics and silviculture, and the development of suitable processing technologies and commercial scale plantation sawmills.

## 4.3.2 Prices

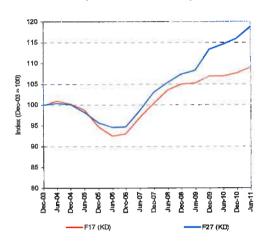
Figure 4-21 presents price indices for structural grade hardwood sawn timber since 2003 (left hand chart) and flooring products (right hand chart). The price increases in these categories in the recent past is a result of producers specialising in their products and a reflection of supply limitations.

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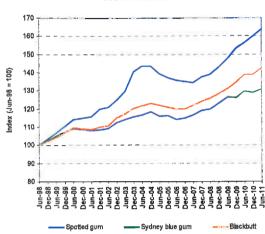
URS considers these price trends could persist as long as demand – driven by alterations and additions activity – remains strong. However, competition from strength products such as laminated veneer lumber is likely to provide an upper price limit, particularly in the hardwood structural market.

Figure 4-21 Hardwood structural and flooring price indices

# Price index for selected hardwood structural products, nationally



# Price Index for select grade flooring products, NSW market



Source: Timber Market Survey 2010

## 4.3.3 Outlook

Demand for higher value appearance markets such as flooring is likely to continue in keeping with alterations and additions activity.

The increasing constraints on native forest resources in countries such as Malaysia and Indonesia will limit the ability of imports to capture a greater share of the Australian market. In addition, increasing efforts to ensure the legality and sustainability of imported tropical timber may also constrain imports.

Supply from Australia's public native forests is likely to continue to decrease, creating opportunities for existing suppliers, private native forests or plantations to enter the market. Prices are expected to remain firm, but will be constrained by imports from competitor and substitute products.

Table 4-3 Summary of market outlook for Australian hardwood sawn timber

Year	Outlook
2012	<ul> <li>Demand for higher value appearance products is likely to continue to grow nationally. Supply from the native forest resource will continue to decline and prices are likely to respond.</li> </ul>
2017	<ul> <li>Within the next five years, opportunities may emerge for the plantation resource to enter this market; however the volume of wood flow may not be sufficient to encourage substantial investment in the capacity of the processing sector.</li> </ul>
2022	<ul> <li>Demand is likely to continue to grow, which will be met by both domestic suppliers and, increasingly, from importers of a range of competitor and substitute products</li> </ul>

Source: URS

The implications for FT are:

- decreasing native hardwood supply on mainland Australia suggests opportunities exist for
   Tasmanian native resource, especially in the higher value appearance markets;
- opportunities may also exist for the plantation-grown resource, if managed to produce sawlogs of equivalent quality to the native hardwood resource;
- FT currently holds a number of long term supply contracts for Category 1 and 3 hardwood sawlogs. These contracts have been renegotiated recently and will not expire until 2027. The total contracted volume for these sawlogs is approximately m<sup>3</sup>; and
- demand factors suggest that opportunities may exist for expanding this market, especially in relation to the Australian alterations and additions sector.

# 4.4 Summary

A summary of the outlook for FT's major products in 2012, 2017 and 2022 is presented in Table 4-4, Table 4-5 and Table 4-6 respectively.

Table 4-4 Summary of market outlook for major products (2012)

Products	Outlook
Woodchip and pulplogs	<ul> <li>Continued reduction in Japanese demand for native forest wood fibre coupled with an increase in demand for hardwood plantation wood fibre.</li> </ul>
	<ul> <li>The overall volume of wood fibre consumed by Japan is not likely to increase beyond historically high levels. Downward pressure on real prices is likely to continue.</li> </ul>
	<ul> <li>Chinese growth in demand for wood fibre is likely to continue to increase and has the potential to consume large volumes of Australian native woodchip and pulp logs.</li> </ul>
	<ul> <li>Prices currently provide low stumpage to Australian growers. Upward pressure on prices will emerge as China seeks to secure increasing volumes.</li> </ul>
Log exports	Growth in Chinese demand for log imports is likely to continue.
	<ul> <li>This market will be highly competitive and prices will be volatile owing to commodity features of log export market.</li> </ul>
	<ul> <li>Key factors include policy positions such as the Russian log export excise duty.</li> </ul>
	<ul> <li>FT is seeking to increase substantially its log exports, of peeler grade logs in particular, over the next five years.</li> </ul>
	— This approach is intended to increase market interest in its wood products and attract further investment in processing within Tasmania that will supplement the existing rotary peeled veneer operations.
Sawntimber	<ul> <li>Demand for higher value appearance products is likely to continue to grow nationally.</li> <li>Supply from native forest resources will continue to decline and prices will respond.</li> </ul>

Source: URS



Table 4-5 Summary of market outlook for major products (2017)

Products	Outlook
Woodchip and	Australian plantation hardwood supply expected to peak.
pulplog <b>s</b>	<ul> <li>Japanese importers are expected to have largely transitioned out of Australian native woodchip, but are unlikely to consume all of Australia's hardwood plantation wood fibre.</li> </ul>
	Chinese demand for wood fibre is likely to continue to be strong.
	<ul> <li>The viability of this market for Australian growers will be partly conditional on continued high pulp prices and on achieving agreement on a woodchip price that provides adequate stumpage to growers.</li> </ul>
	The proposed Gunns pulp mill development will have a significant impact:
	If the mill is commissioned before 2017, it could consume the majority if not all of Tasmania's plantation wood fibre.
	— If the mill is not commissioned, then a market for additional considerable volumes of plantation wood fibre will need to be found.
Log exports	<ul> <li>Traditional hardwood log export suppliers are likely to be under pressure due to sustainability concerns.</li> </ul>
	<ul> <li>Chinese demand is likely to remain strong and China will seek to secure both hardwood and softwood supplies to satisfy this demand.</li> </ul>
Sawntimber	Within the next five years, opportunities may emerge for the hardwood plantation resource to enter this market.
	However, the volume of wood flow may not be sufficient to encourage substantial investment in the capacity of the processing sector.

Source: URS

Table 4-6 Summary of market outlook for major products (2022)

Products	Outlook
Woodchip and pulplogs	<ul> <li>Australian plantation hardwood supply declining, after the peak from first rotation harvesting across most states.</li> </ul>
	<ul> <li>Demand from China expected to continue to be high, and sustainability of supplier countries will be tested.</li> </ul>
Log exports	<ul> <li>Chinese demand is likely to lead to on-going questions about the sustainability of traditional hardwood log exporters.</li> </ul>
Sawntimber	<ul> <li>Demand is likely to continue to grow, which will be meet by both domestic suppliers and, increasingly, from importers of a range of competitor and substitute products.</li> </ul>

Source: URS

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# **Limitations**

URS Australia Pty Ltd (URS) has prepared this report in accordance with the usual care and thoroughness of the consulting profession for the use of The Crown in Right of Tasmania and only those third parties who have been authorised in writing by URS to rely on the report. It is based on generally accepted practices and standards at the time it was prepared. No other warranty, expressed or implied, is made as to the professional advice included in this report. It is prepared in accordance with the scope of work and for the purpose outlined in the Proposal dated 3 June 2011.

The methodology adopted and sources of information used by URS are outlined in this report. URS has made no independent verification of this information beyond the agreed scope of works and URS assumes no responsibility for any inaccuracies or omissions. No indications were found during our investigations that information contained in this report as provided to URS was false.

This report was prepared between 1 September and 14 November 2011 and is based on the conditions encountered and information reviewed at the time of preparation. URS disclaims responsibility for any changes that may have occurred after this time.

This report should be read in full. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

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# Appendix A Terms of Reference

## Forestry Tasmania - Strategic Review

RFT Number: SPM11-01

#### Introduction

Treasury seeks to appoint a suitably qualified and experienced Consultant to undertake a Strategic Review of Forestry Tasmania and provide recommendations to Government in relation to the options for future structures, governance and business models under which Forestry Tasmania may operate in the new Tasmanian forest industry emerging from implementation of the Statement of Forest Principles.

# Background

Forestry Tasmania is a Government Business Enterprise with the principal objective of undertaking the management and sale of timber resources in Tasmanian State Forests on a commercial basis.

Forestry Tasmania operates in a very complex market and industry environment. Forestry Tasmania's current operations are driven by its statutory obligation to supply a minimum of 300 000 m<sup>3</sup> of eucalypt veneer and sawlogs and the Government's commitment to the Tasmanian Community Forest Agreement (TCFA).

Forestry Tasmania is exposed to international and domestic market volatility, with exposure further increased due to customer concentration. Over the past few years, Forestry Tasmania has been adversely affected by the large decline in the market for export pulpwood, exacerbated by the severe contraction in the Japanese economy and the recent strength of the Australian dollar.

Forestry Tasmania is also required to manage the forests for multiple use, including for recreation, education and scientific research in non-wood production areas of State Forests.

It is expected that implementation of the Statement of Forest Principles will have a significant impact on the current operations of Forestry Tasmania and it will need to adapt to this new environment. Forestry Tasmania faces a potential for a decrease in area available for commercial operation and the corresponding increase in reserves to maintain. A major customer has also revised its business model. A review is necessary to determine how to best structure Forestry Tasmania to be a sustainable business into the future.

#### Review process

The Review will be conducted in three stages and with the services required to be provided in these three stages:

- Stage 1 Situation assessment and options for future structures and business models;
- Stage 2 Detailed examination of scenarios and selected options; and
- Stage 3 Implementation plan for agreed option.

A report will be deliverable to Government at the end of each stage with progress to the next stage subject to consideration by Government.



## Appendix A

The service has been divided into three stages to provide Government the opportunity to consider the report and make a decision before progressing to the following stage, with the Government retaining the flexibility to not proceed to Stage 2 and Stage 3.

This approach will also allow for the project to run in parallel to the work being undertaken on implementation of the Statement of Forest Principles.

For clarity, the Department reserves the right to not proceed with future stages and appoint other consultants for the future stages.

## Scope of the Review

The Review should inquire into and report on the following matters:

## Business model and operations

- 1. Assess Forestry Tasmania's current business model and financials and identify any key deficiencies and risks to Government, including loss of value, particularly in the context of proposed and emerging industry and market changes.
- 2. Consider the benefits and costs of Forestry Tasmania managing the forests for multiple uses and pursuing activities outside of core forestry management and production roles.
- 3. Consider the importance of certification for Forestry Tasmania's products.

#### Market conditions

- 1. Examine the scenarios and impacts of the Statement of Forest Principles on Forestry Tasmania.
- 2. Assess the lessons learned from other jurisdictions that have faced similar precedents for industry restructuring; or are currently considering such options.
- Consider changes to the level of local demand for sawlogs, their end use and the continued requirement for a guaranteed supply level and implications of this legislated target in terms of forest planning and effect on supply and demand dynamics in the local market.

#### Structure and governance

Examine and assess the relevance of existing structures, functions and governance framework
options for Forestry Tasmania, in the context of the proposed and emerging changes to the
industry.

## **Documents**

The specification refers to the following documentation or sources of information:

- a) Statement of Forest Principles;
- b) Forestry Act 1920; and
- c) Government Business Enterprises Act 1995.

## Implementation Timetable

The Stage 1 report will be required within three months of the signing of the contract. Progress and timing of reports for Stages 2 and 3 will be subject to consideration by Government.

The term of the contract will be set for a period of 12 months, with provision to extend until all the required services are provided.

## Appendix A

# Deliverables

Unless otherwise agreed with Treasury, the Consultant will deliver:

- a Stage 1 draft report, including preliminary findings, within 2 months of the commencement of the review; and
- Stage 1 final report one month following the draft report.

Progress to Stage 2 and Stage 3 will be subject to approval by Government and the timing of deliverables will be agreed with Treasury.

## Reporting

The Consultant will report to the Project Manager who will be the principal contact point in Treasury.

The Consultant will be required to work closely with:

- Forestry Tasmania; and
- project staff.

The Consultant will also present advice from time to time to the Treasurer, Minister for Energy and Resources and senior officials as requested by the Project Manager.









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