Foreign Agricultural Service
GAIN Report
Global Agriculture Information Network

Required Report - public distribution

Date: 10/16/2000

GAIN Report #AS0038

Australia

Solid Wood Products

Annual

2000

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Report Highlights:
Softwood log production rebounded in 1999/2000 as housing starts were strong prior to the introduction of the Goods and Services Tax on June 30, 2000. Australia's apparent consumption of sawnwood increased by 11 percent in 1999/2000 to an estimated 4.8 million cubic meters. Imports of coopers products, staves and parquet flooring continued strong in 1999/2000.

Includes PSD changes: Yes
Includes Trade Matrix: Yes
Annual Report
Canberra [AS1], AS

Executive Summary

Plantation area on September 30, 1999 was an estimated 1,337,280 hectares, 948,250 hectares of softwood and 389,030 hectares of hardwoods. Over the past three years, area in plantations has increased by about 215,000 hectares with a record 95,000 hectares established in 1998/99. Hardwoods are mainly native eucalypts and radiata pine is the most common softwood.

Plantations represent less than 1 percent of Australia's forests yet supply over half of the wood used by domestic wood processors. Overall, of the volume of logs processed in Australia, about 58 percent of saw, ply and veneer logs processed at June 30, 1998 were sourced from plantations. ABARE's long term projections put forest log contributions at 70 percent of total logs processed by 2039/40. Plantations have become a key element in government forest and environment policy and industry development strategies, with virtually all future growth in log availability expected to come from plantations.

Softwood log production was up slightly in 1998/99 after a decline in the previous year. Production rebounded in 1999/2000 as housing starts remained strong before the introduction of the GST. Processing softwood logs have increasingly been sourced from the rapidly increasing softwood plantations. Declining availability and increased prices of hardwood timber has improved interest in increasing plantings of Australian native hardwood species.

Australia's apparent consumption of sawnwood increased by 11 percent in 1999/2000 to an estimated 4.8 million cubic meters. Coniferous sawnwood consumption was up 13 percent to 3.37 million cubic meters, and hardwood consumption was up five percent to 1.42 million cubic meters. This increase was driven by an increase in building activity prior to the introduction of the GST on June 30, 2000.

The Australian economy has recorded growth averaging above 4 pct p.a. since 1997, and is expected to slow to around 3 pct p.a. growth into 2001-02. While growth remains strong across most sectors of the economy, the housing and construction industry has suffered a substantial downturn in the latter half of 2000. The first half of 2000 saw an escalation in housing and construction activity, as buyers sought to beat the July 2000 introduction of the 10 pct Goods and Services Tax (GST). With the new tax now in effect, building approvals have fallen to over 40% below their pre-GST peak. This effect is however expected to be temporary, with housing starts and construction activity forecast to recover during the first half of 2001. Steadily rising interest rates (up 150 basis points since November 1999) are also having a dampening effect on construction activity

Over the period from 1990 to 1999 softwood imports as a percentage of total consumption has decreased from 31 percent to just over 20 percent. For hardwood, imports are less than ten percent of domestic hardwood consumption. The increased domestic share has been largely at the expense of Douglas fir. The decrease in Douglas fir imports is reported to have occurred due to supply constraints and higher prices in the U.S. The trend is likely to continue due to the increased sawmill capacity in South Australia and New South Wales. New Zealand softwood timber imports represented 59 percent of Australia's sawn timber imports in 1998, down slightly from the 61 percent of 1998.

Production

PSD Table						
Country	Australia					
Commodity	Softwood Logs				1000 CUBIC METERS	
	Revised	1999	Preliminary	2000	Forecast	2001
	Old	New	Old	New	Old	New
Market Year Begin		07/1998		07/1999		07/2000
Production	12755	10760	11150	10812	0	11122
Imports	1	1	1	1	0	1
TOTAL SUPPLY	12756	10761	11151	10813	0	11123
Exports	94	785	250	750	0	750
Domestic Consumption	12662	9976	10901	10063	0	10373
TOTAL DISTRIBUTION	12756	10761	11151	10813	0	11123

PSD Table						
Country	Australia					
Commodity	Softwood Lumber				1000 CUBIC METERS	
	Revised	1999	Preliminary	2000	Forecast	2001
	Old	New	Old	New	Old	New
Market Year Begin		07/1998		07/1999		07/2000
Production	2300	2331	2425	2555	0	2785
Imports	655	626	675	740	0	740
TOTAL SUPPLY	2955	2957	3100	3295	0	3525
Exports	14	10	25	55	0	55
Domestic Consumption	2941	2947	3075	3240	0	3470
TOTAL DISTRIBUTION	2955	2957	3100	3295	0	3525

Forest Area

Australia has a total forest and woodland area of 157 million hectares, made up of around 44 million hectares of native forest, 112 million hectares of woodland, and around 1.3 million hectares of plantations. An estimated 13.3 million hectares of native forest are classified multiple use and are available for timber production, with about 7.3 million hectares in state forests, 2.9 million hectares in other crown lands, and 3.1 million hectares in private land. Approximately 27 percent of forest land is privately owned with the remaining 73 percent in the public domain.

Plantation area on September 30, 1999 was an estimated 1,337,280 hectares, 948,250 hectares of softwood and 389,030 hectares of hardwoods. Over the past three years, area in plantations has increased by about 215,000 hectares with a record 95,000 hectares established in 1998/99. Hardwoods are mainly native eucalypts and radiata pine is the most common softwood.

STATE	CURRENT PLANTATIONS On June 30, 1999 ('000 ha)		NEW PLANTATIONS ESTABLISHED IN 1998/99 ('000 ha)	
	Softwood	Hardwood	Softwood	Hardwood
NSW	247.93	44.45	2.68	4.38
Victoria	219.20	65.38	0.84	25.33
Queensland	185.56	11.18	0.11	2.51
Western Australia	94.50	152.80	3.70	27.50
South Australia	106.15	12.23	0.48	8.00
Tasmania	75.41	101.84	2.37	16.47
Northern Territory	5.24	0.95	0.00	0.45
Australian Capital Territory	15.27	0.19	0.00	0.00
Total	948.26	389.02	10.18	84.64

SOURCE: National Forest Inventory, Canberra, March 2000

As of June 30, 1997, around 70 percent of forest plantations were publically owned, representing a three percent increase on the year before. Victoria has sold the harvesting and replanting rights to about 160,000 hectares of softwood plantations, but retained ownership of the land. The high degree of public ownership reflects active government involvement in plantation development over the past thirty years. This involvement included subsidized loans and grants through the Softwood Forestry Agreement Acts, the National Afforestation Program and direct investment by state forest agencies. Recent government policy has been to encourage private participation in forest plantation development.

Plantations represent less than 1 percent of Australia's forests yet supply over half of the wood used by domestic wood processors. Overall, of the volume of logs processed in Australia, about 58 percent of saw, ply and veneer logs processed at June 30, 1998 were sourced from plantations. ABARE's long term projections put forest log contributions at 70 percent of total logs processed by 2039/40. Plantations have become a key element in government forest and environment policy and industry development strategies, with virtually all future growth in log availability expected to come from plantations.

Forest Outlook

Australian forest industries have a number of impediments to future growth and development. The basic problem is the development of internationally competitive forest industries while at the same time protecting the environment. The Government of Australia (GOA) introduced the Regional Forest Agreements (RFA) Bill into Parliament on June 30, 1998. The Bill is an attempt by the GOA and the states to cooperate and coordinate forest development. It virtually assures that the Commonwealth government will not intervene or override state forest management and wood supply arrangements provided that the states meet commitments under the RFA. See Policy section for more details.

A recent ABARE study identified an additional million hectares of cleared farmland where timber production promised to be more profitable than current farming. Most new plantations are likely to be developed on cleared agricultural land. The study pointed to the need to develop competitive processing facilities in some of the concerned regions. At current processing capacity levels, the potential area drops to about 570 thousand hectares. Several companies have been actively promoting investing in blue gum plantations. According to one analyst, attractive tax benefits have been responsible for an estimated 330 million dollars of investment in these plantation over the 1998/99 year.

The report found potential for expansion in the Murray Valley region of NSW and Victoria, the central Gippsland regions of Victoria, South East Queensland, Western Australia, and Tasmania. Other regions had economic potential but were constrained by lack of processing infrastructure.

In October of 1997 the Commonwealth and State Governments announced the 2020 Vision Policy, which aims to triple plantation area by 2020. This would require planting about 80,000 hectares per year. See Policy section for additional details.

Consumption

Australia's apparent consumption of sawnwood increased by 11 percent in 1999/2000 to an estimated 4.8 million cubic meters. Coniferous sawnwood consumption was up 13 percent to 3.37 million cubic meters, and hardwood consumption was up five percent to 1.42 million cubic meters. This increase was driven by an increase in building activity prior to the introduction of the GST on June 30, 2000.

Softwood log production was up slightly in 1998/99 after a decline in the previous year. Production rebounded in 1999/2000 as housing starts remained strong before the introduction of the GST. Processing softwood logs have increasingly been sourced from the rapidly increasing softwood plantations. Declining availability and increased prices of hardwood timber has improved interest in increasing plantings of Australian native hardwood species.

In coming years the industry expects softwood to increase its share of the overall timber market. This increase will come from: the increasing availability of softwood logs as Australian and New Zealand radiata plantations mature; the reduced availability of hardwood saw logs due to further areas of native forest being protected from logging; and, the increased acceptability and lower price of softwood for structural applications.

Recent reports indicate that at least one region in NSW has a large backlog of thinings in both state and private forests. The inability to clear this backlog is now constraining production of higher value sawlogs which is in ever-increasing demand.

Subsequent reports have pointed out that around 70 percent of Australia's imports by value is for pulp and paper products, indicating that the domestic market would be an obvious market for increased pulp and pulp product production. However, producing pulp products domestically has been constrained by the fact that no one region has sufficiently secure timber resources to justify the construction of a world class paper mill. Government sources suggest that this constraint is endemic to the Australian timber industry due to its regionalized structure. Furthermore, controversy surrounding the removal of trees has undermined confidence in such projects.

Plantation softwood processed through large saw mills achieves economies of scale not available to the often smaller hardwood saw mills. Future hardwood saw milling seems destined to concentrate on higher value products such as select grade timber, moldings, and furniture components. Hardwood will retain markets where its attributes are not challenged by radiata pine i.e. floors and stairways. The majority of softwood logs are used as saw and veneer logs, or for paper and paperboard. The former accounted for about 65 percent of total softwood logs produced in 1997/98, while the latter utilized 22 percent with the remainder used for wood-based panel and other sundry applications.

Trade

Import Trade Matrix			
Country	Australia		
Commodity	Softwood Lumber		
Time period	Jan - Dec	Units:	000m3
Imports for:	1998		1999
U.S.	58	U.S.	41
Others		Others	
New Zealand	375	New Zealand	371
Canada	159	Canada	190
Finland	5	Finland	10
Fiji	5	Sweden	6
Sweden	3	Fiji	1
Russia	2	Czech Republic	1
Czech Republic	1	Papua New Guinea	1
Solomon Islands	1	Malaysia	1
		Austria	1
		Russia	1
Total for Others	551		583
Others not Listed	2		2
Grand Total	611		626

Export Trade Matrix			
Country	Australia		
Commodity	Softwood Lumber		
Time period	Jan - Dec	Units:	000m3
Exports for:	1998		1999
U.S.	3	U.S.	1
Others		Others	
The Philippines	5	The Philippines	2
Japan	1	Bangladesh	2
Malaysia	1	China	1
Nauru	1	Taiwan	1
Total for Others	8		6
Others not Listed	1		3
Grand Total	12		10

Factors affecting US trade

Over the period from 1990 to 1999 softwood imports as a percentage of total consumption has decreased from 31 percent to just over 20 percent. For hardwood, imports are less than ten percent of domestic hardwood consumption. The increased domestic share has been largely at the expense of Douglas fir. The decrease in Douglas fir imports is reported to have occurred due to supply constraints and higher prices in the US. The trend is likely to continue due to the increased sawmill capacity in South Australia and New South Wales. New Zealand softwood timber imports represented 59 percent of Australia's sawn timber imports in 1998, down slightly from the 61 percent of 1998.

There has been a continuing shift from Douglas fir from North America to radiata pine and Douglas fir from New Zealand. Increasing production and competitive prices are largely responsible for this development. Increased production of higher quality Australian and New Zealand softwood timber from maturing softwood plantations, and improved milling techniques mean that radiata pine will compete more aggressively with imported softwood from the US. Competition will be increasingly difficult in framing, wall studs, flooring, etc. Douglas fir will still be cheaper and more effective where larger sized solid sections are needed.

The Australian Quarantine Inspection Service (AQIS) has initiated an import risk analysis on timber from North America. See policy section for more details.

Policy

Forestry is subject to a range of regulations administered by federal, state and local governments. Land and forest management is primarily the responsibility of the state and territory governments. Each state has a forest authority responsible for the management and control of publically-owned forests, in accordance with the Forestry Acts and Regulations of the state or territory concerned. State governments still own, manage and market a significant proportion of the plantation resource in Australia, as well as the bulk of the native timber supply. The active promotion of plantation forestry is a government priority as it attempts to reduce the large trade deficit in forest products.

In October 1997 the Commonwealth Government, in conjunction with State governments and the forest industry, launched *Plantations for Australia: The 2020 Vision*. The goal of this program is to triple the area in plantations by 2020. The program aims to remove institutional or market based factors which inhibit plantation development Achieving the objective of the program would require planting of around 80,000 hectares per year. New plantings are estimated at 95,000 hectares in 1998/99, encouraged by a surge of interest in tax-linked blue gum projects. Sustained planting necessary to reach the 2020 goals probably requires development of carbon trading to encourage tree planting.

The Regional Forest Agreement (RFA) is a consultative process where the Commonwealth Government and the State governments agree on the long term management and use of forests in particular forest regions for up to 20 years. A key objective in each RFA is to establish a comprehensive, adequate and representative conservation reserve system that meets or exceeds criteria for preserving forest bio-diversity. A second key objective is to provide forest related industries with security of access to specified native forest areas for the duration of the agreement to facilitate investment in these industries. The third objective is to provide ecologically sustainable management of the forest estate. Not all of the RFA's have been put into place with recent disagreements between the Western Australian and Queensland governments and the Commonwealth, highlighting the difficult political dimensions of long term planning for the forestry industry.

The Australian Quarantine and Inspection Service (AQIS) has started an Import Risk Assessment (IRA) on imports of coniferous sawn timber and logs from North America as well as wood packing materials from Asia. AQIS has determined that the IRA will be the non-routine process based on the consideration that the analysis is expected to be large and technically complex. As part of this process, AQIS is due to release an issues paper for comment. This paper will include such aspects of the IRA as: expected scope of the analysis; the main pest and disease risk issues; a prospective timetable; and other matters to be considered. Government sources indicate that this will be a lengthy process and a final IRA is not expected until late 2001.

Marketing and Building Standards

The change to the Australian building code that enabled three story Multi-Residential Timber Frame Construction (MRTFC), and construction of the first three story residential project at Lutwyche in Brisbane in 1995 was an important development for the timber industry.

While there is only minimal three story timber framed MRTFC construction in Australia, there has been a significant increase in the use of the technology, in single and two level multiple occupancy apartments requiring sound insulation and fire separation between units.

The American industry, through the Western Wood Products Association (WWPA), also helped develop a niche market for timber bridge construction in Australia. WWPA was involved in the construction of several timber bridges in Australia, including the construction of a stress laminated softwood (Douglas fir) timber bridge at Imbil in Queensland. WWPA, and more recently the Softwood Export Council (SEC), have conducted and/or participated in a number of seminars on the benefits of Stress-Laminated Timber Bridge (SLTB) construction. The Imbil SLTB has been in service for over five years and continues to perform well, even after being under 7-9m floods each year.

The WWPA and more recently the SEC completed the field testing component of a research and development project involving the Queensland Department of Primary Industries (QDPI) Forestry Research and the US Forest Products Laboratory (FPL) in Madison, Wisconsin in October 1998. The project was to assess the performance of six different chemical pressure impregnation treatments in second growth Douglas fir in both in-ground and above-ground applications.

This project is designed to enhance Douglas fir's perceived suitability in both in-ground and above-ground weather exposed applications such as for deck bearers and joists, and in timber bridge construction. It could also assist in opening up markets for service poles and cross-arms for electricity distribution authorities.

This program's major potential lies in applications requiring larger section sizes and lengths that are available in Douglas fir. The Australian timber industry has difficulty in producing large section sizes and long lengths in durable hardwoods and in treated Radiata Pine.

Last year the SEC received a "final" report from CSIRO which was engaged to convert US grades and sizes of Douglas fir in-grade data to that required for Australia. This was completed and SEC has produced a brochure that explains what "in-grade" properties for Douglas fir means and provides engineers' and designers' in-grade design properties for both US ALS sizes and Australian Scantling sizes of timber.

The impact of this is that US grades and sizes of Douglas Fir from registered mills in the US can be imported into and used in Australia and in doing so comply with the requirements of the Australian Timber Engineering Standard AS 1720.1 and the Building Code of Australia (BCA).

Market Segment Analysis

Australians consume 20 million cubic meters annually of forest products, of which about 7.3 million cubic meters are imported.

Construction

The Australian economy has recorded growth averaging above 4 pct p.a. since 1997, and is expected to slow to around 3 pct p.a. growth into 2001-02. While growth remains strong across most sectors of the economy, the housing and construction industry has suffered a substantial downturn in the latter half of 2000. The first half of 2000 saw an escalation in housing and construction activity, as buyers sought to beat the July 2000 introduction of the 10 pct Goods and Services Tax (GST). With the new tax now in effect, building approvals have fallen to over 40% below their pre-GST peak. This effect is however expected to be temporary, with housing starts and construction activity forecast to recover during the first half of 2001. Steadily rising interest rates (up 150 basis points since November 1999) are also having a dampening effect on construction activity.

Australian consumption of sawnwood and wood based panels tends to follow the housing cycle as over 70 percent of sawn timber is used for residential construction, alterations, and additions to dwellings. Non-residential construction and the manufacture of furniture each account for a further 10 percent.

Australia consumed 4.8 million cubic meters of sawnwood and 1.7 million cubic meters of wood based panels (plywood, particle board, and medium density fibreboard) in 1999/2000. These figures drove consumption to the largest annual rise in structural wood consumption in the past 10 years. Consumption of softwood also increased. Consumption has remained strong through to mid 2000.

Softwood log production is driven by domestic building activity. Australia exports a small volume of softwood logs and imports are negligible. Figures in the PS&D tables are reported on a July-June basis as production and consumption data are not available for CY.

While the cyclical nature of the building cycle is an integral part of the underlying demand for sawn timber, emerging trends in the housing sector are very important. Australian home buyers are showing an increasing preference for smaller, medium density dwellings. The number of persons per household has fallen consistently over the past 35 years. In 1961 the number of persons per household was 3.55 and by 1996 it had fallen to 2.72.

Changes in technology have also resulted in the increased substitution of wood products with non-wood products, such as steel, plastics, aluminum and concrete. In the Australian housing market, aluminum, steel, concrete and brick are increasingly replacing timber. Aluminum now dominates the market for window frames, and steel is beginning to make inroads into the wall and roof framing markets, currently estimated at about five percent of the market. Skirting boards and door trims are usually painted rather than stained so timber type is not as important in this segment. Concrete is increasingly being used for floors and a single course of brick (brick veneer) dominates the external cladding market. These products will continue to compete with wood, depending upon technological advances, competitiveness, and price.

INTEREST RATES: HOUSING LOANS BANKS	
1995/96	9.75
1996/97	7.2
1997/98	6.7
1998/99	6.5
1999/2000	7.8

Source: Reserve Bank of Australia

BUILDING COMMENCEMENTS & APPROVALS - NUMBER & VALUE					
		VALUE (A$MILLION)			
PERIOD	TOTAL NO.	NEW RESIDENTIAL BUILDING	ALTERATIONS& ADDITIONS TO RESIDENTIAL BUILDING	NON-RESIDENTIAL BUILDING	TOTAL BUILDING
BUILDING COMMENCEMENTS					
1992/93	163,088	14,725	2,267	9,225	26,368
1993/94	181,821	16,513	2,507	10,379	29,564
1994/95	170,071	16,566	2,583	10,556	29,867
1995/96	124,685	12,860	2,408	11,762	27,033
1996/97	128,172	13,376	2,588	12,883	28,833
1997/98	147,781	16,181	3,028	14,287	33,497
1998/99	149,420	16,838	3,010	11,886	31,733
1999/00					
Sept Qtr	41,447	5,026	837	2,927	8,752
Dec Qtr	41,994	4,881	739	2,762	8,324
Mar Qtr	44,494	5,223	908	2,406	8,521
BUILDING APPROVALS (PERMITS)					
1992/93	172,270	14,121	2,089	7,677	23,886
1993/94	188,844	15,685	2,289	8,786	26,760
1994/95	171,083	15,470	2,433	9,615	27,518
1995/96	124,712	12,119	2,284	10,729	25,132
1996/97	136,625	13,678	2,561	12,730	28,969
1997/98	156,542	16,571	3,023	14,462	34,056
1998/99	156,451	17,511	2,918	12,568	32,998
1999/00	173,013	21,265	3,478	11,764	36,508

SOURCE: Australian Economic Indicators, September 2000.

Spending on home alterations and additions, and on non-residential construction, was strong through most of 1999/2000, bolstering demand. The strong demand for building materials led to an increase in ABARE's price index for timber and joinery of about 5.4 percent 1999/2000. In hardwood the industry is transitioning out of structural timbers and into value-added products which require additional marketing skills and investment.

Furniture and Interiors Sector

Furniture and interior sector consumption of timber reflects the general level of building activity which in turn mirrors general economic activity. With a strong domestic economy, this sector has been holding up quite well. The furniture industry is centered around Sydney and Melbourne.

The price index for joinery products increased from 119.6 in 1998/99 to 122.2 in 1999/2000. Aggregate output of the wooden structural fittings and joinery increased to A$2,512 million from the A$2,184 million produced in 1997/98.

Furniture manufacturing is small in volume and tends to be concentrated in niche markets e.g. Tasmanian blackwood. Many manufacturers have moved overseas in order to reduce production costs. Some products are imported "knocked down" and assembled in Australia. There is some opportunity to expand this market. While price competitiveness continues to be an important factor, niche markets do exist for more expensive imported product.

One recent development is the growth of natural feature (NF) Australian hardwood in the furniture industry. The acceptance of NF as a legitimate and popular grade had radically changed the potential for eucalyptus. Previously over 70 percent of sawn output would not have made traditional appearance grades due to the 'character marking' relevant in the species. Companies have had considerable success in marketing natural features in the hardwood flooring market. Growth in reconstituted and glue laminated products favors plantation grown wood, with many of these products incorporating low grade wood and small diameter logs from fast grown, short rotation plantations.

Material Handling Industry

A major user of packaging and industrial paper is the manufacturing sector, in particular the food and beverages sector. Exports of manufactured goods and primary produce such as fresh fruit, vegetables and flowers are also intensive users of packaging paper.

The overall output of the wood and wood products industry in 1998/99 was A$5,852 million. The output of wooden structural fittings increased 15 percent to A$2, 512 million in 1998/1999.

Only minor amounts of packaging timber is imported.

Other Marketing Opportunities

Imports of coopers products and staves etc. have increased rapidly in the past few years, in line with the tremendous growth in the Australian wine industry. Imports rose from A$26.5 million dollars in 1996/1997 to A$56.9 million dollars in 1999/2000. The US and France are the big suppliers of this material. Imports of assembled parquet flooring panels increased from A$6.3 million to A$14 million over the same period of time.

Commercial Impediments

Prices received for sawnwood imports increased across all types during 1999/2000, after falling in 1998/99.

SAWNWOOD IMPORT UNIT VALUES
(A$/CUBIC METER)

	1996/97	1997/98	1998/99	1999/2000
Douglas Fir (roughsawn)				
Canada	354	373	331	349
New Zealand	320	331	320	344
United States	375	406	402	444
Radiata				
New Zealand				
Roughsawn	426	473	467	496
Dressed	410	441	454	494
Meranti (roughsawn)				
Malaysia	793	693	685	786

Source: Australian Bureau of Agricultural and Resource Economics

Tariffs

The general tariff on sawn timber (4407.10.10) is five percent, four percent for Canada and four percent for countries with developing country status.

There is no import tariff on softwood logs.

Stategic Indicator Tables

FOREST PRODUCT			
STRATEGIC INDICATOR TABLES FOR AUSTRALIA			
(Please do not add/delete rows or columns -- note and other info must be added below row 110 -- thank you!)			
CONSTRUCTION MARKET			
Country: Australia	Previous	Current	Following
Report Year: 2000	Calendar Year	Calendar Year	Calendar Year
Total Housing Starts (thousand units)	128	147	149
--of which, wood frame (thousand units)	n/a	n/a	n/a
--of which, steel, masonry, other materials (thousand units)	n/a	n/a	n/a
--of total starts, residential (thousand units)	n/a	n/a	n/a
----of residential, single family (thousand units)	n/a	n/a	n/a
----of residential, multi-family (thousand units)	n/a	n/a	n/a
--of total starts, commercial (thousand units)	n/a	n/a	n/a
Total Value of Commercial Construction Market ($US mil)	29,065	32,068	34,289
Total Value of Repair and Remodeling Market ($US million)	3,911	4,500	5,200
FURNITURE & INTERIORS MARKET			
Country: Australia	Previous	Current	Following
Report Year: 2000	Calendar Year	Calendar Year	Calendar Year
Total Housing Starts (number of units)	128,000	147,000	149,000
Total Number of Households)	n/a	n/a	n/a
Furniture Production ($US million)	2,440	2,460	2,500
Total Furniture Imports ($US million)	8	12	12
Total Furniture Exports ($US million)	1	1	1
Interiors Market Size ($US million)	n/a	n/a	n/a
MATERIAL HANDLING MARKET			
Country: Australia	Previous	Current	Following
Report Year: 2000	Calendar Year	Calendar Year	Calendar Year
Total Value of Industrial Output ($US million)	135,000	137,000	140,000
New Pallet Production (million units)	n/a	n/a	n/a

FOREST AREA			
Country: Australia	Previous	Current	Following
Report Year: 2000	Calendar Year	Calendar Year	Calendar Year
Total Land Area (million hectares)	768	768	768
Total Forest Area (million hectares)	157	157	157
--of which, Commercial ('000 hectares)	n/a	n/a	n/a
----of commercial, tropical hardwood ('000 hectares)	n/a	n/a	n/a
----of commercial, temperate hardwood ('000 hectares)	n/a	n/a	n/a
----of commercial, softwood ('000 hectares)	n/a	n/a	n/a
Forest Type			
--of which, virgin ('000 hectares)	n/a	n/a	n/a
--of which, plantation ('000 hectares)	1,222	1,300	1,337
--of which, other commercial (regrowth) ('000 hectares)	n/a	n/a	n/a
Total Volume of Standing Timber (thousand cubic meters)	n/a	n/a	n/a
--of which, Commercial Timber ('000 cum)	n/a	n/a	n/a
Annual Timber Removal ('000 cum) 1/	n/a	n/a	n/a
Annual Timber Growth Rate ('000 cum)	n/a	n/a	n/a
Annual Allowable Cut ('000 cum)	n/a	n/a	n/a
1/ If Removals exceeds growth rate, analyze impact in text.			
WOOD PRODUCTS SUBSIDIES			
Country: Australia	Previous	Current	Following
Year of Report: 2000	Calendar Year	Calendar Year	Calendar Year
Total Solid Wood Export Subsidy Outlay ($US million)	0	0	0
Is there a ban on the export of logs, lumber, or veneer? 1/	No	No	No
Are there export taxes (yes/no)? 2/	No	No	No
Total Wood Production Subsidy ($US million)	n/a	n/a	n/a
Scope (thousands of hectares)	n/a	n/a	n/a
Are there other wood products export expansion activities? 1/	n/a	n/a	n/a
1/ If yes, describe in report.			
2/ If yes, identify in Tariff and Tax Strategic Indicator Table.			

FOREST PRODUCT TARIFFS AND TAXES (percent)		Tariff	Tariff	Other		
Country: Australia	Product	Current	Following	Import	Total Cost	Export
Report Year: 2000	Description 1/	Year	Year	Taxes/Fees	of Import 2/	Tax
4401	Fuel wood in logs, twigs, chips, sawdust, wood waste, whether or not agglomerated in logs, briquettes, pellets etc.	Free	Free	n/a	n/a	n/a
4401.21.00	Wood in chips or particles - Coniferous	5%, DCS Free	5%, DCS Free	n/a	n/a	n/a
4401.22.00	Wood in chips or particles - Non Coniferous	5%, DCS Free	5%, DCS Free	n/a	n/a	n/a
4403	Wood in the rough, whether or not stripped of bark or sapwood, or roughly squared	Free	Free	n/a	n/a	n/a
4404	Hoopwood; Split Poles; Piles; Pickets and Stakes or wood, pointed but not sawn lengthwise; wooden sticks, roughly trimmed but not turned, bent or otherwise worked, suitable for the manufacture of walking sticks, umbrellas, tool handles or the like; chipwood or the like	5%, DCS Free	5%, DCS Free	n/a	n/a	n/a
4405	Wood wool; Wood Flour	Free	Free	n/a	n/a	n/a
4406	Railway or tramway sleepers of wood	5%, DCS Free	5%, DCS Free	n/a	n/a	n/a

4407	Wood Sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or finger jointed, of a thickness exceeding 6mm	Free	Free	n/a	n/a	n/a
4407.10.10	Coniferous: Planed or sanded	5%, DCS:4%, CAN:4%, DCT:5%	5%, DCS:4%, CAN:4%, DCT:5%	n/a	n/a	n/a
4407.10.99	Other Wood	5%, DCS:Free, CAN:4%	5%, DCS:Free, CAN:4%	n/a	n/a	n/a
4407.24.10	Virola, Mahogany, Imbuia, and Balsa, planed or sanded	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4407.24.90	Virola, Mahogany, Imbuia and Balsa, other	5%, DCS:Free	5%, DCS:Free	n/a	n/a	n/a
4407.25.10	Dark Red Meranti, Light Red Meranti and Meranti Bakau, Planed or sanded	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4407.25.90	Dark Red Meranti, Light Red Meranti and Meranti Bakau, other	5%, DCS:Free	5%, DCS:Free	n/a	n/a	n/a
4407.26.10	White Lauan, White Meranti, White Seraya, Yellow Meranti and Alan, Planed or sanded	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4407.26.90	White Lauan, White Meranti, White Seraya, Yellow Meranti and Alan,Other	5%, DCS:Free	5%, DCS:Free	n/a	n/a	n/a
4407.29.10	Other, Planed or Sanded	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4407.29.99	Other, other	5%, DCS:Free	5%, DCS:Free	n/a	n/a	n/a

4407.91.10	Other, of oak, planed or sanded	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4407.91.90	Other, of oak, other	5%, DCS:Free	5%, DCS:Free	n/a	n/a	n/a
4407.92.10	Other, of Beech, planed or sanded	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4407.92.90	Other, of Beech, other	5%, DCS:Free	5%, DCS:Free	n/a	n/a	n/a
4407.99.10	Other, planed or sanded	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4407.99.99	Other, Other	5%, DCS:Free	5%, DCS:Free	n/a	n/a	n/a
4408	Veneer Sheets and sheets for plywood (whether or not spliced) and other wood sawn lengthwise, sliced or peeled, whether or not planed, sanded or finger jointed or a thickness not exceeding 6 mm	5%, DCS:Free	5%, DCS:Free	n/a	n/a	n/a
4409	Wood (including strips and friezes for parquet flooring, not assembled) continuously shaped (tongued, grooved, rebated, chamfered, v-jointed, beaded, moulded, rounded or the like) along any of its edges or faces, whether or not planed, sanded or finger jointed	5%	5%	n/a	n/a	n/a
4409.10.00	Coniferous	DCS:4%, CAN:4%, DCT:5%	DCS:4%, CAN:4%, DCT:5%	n/a	n/a	n/a

4409.20.00	Non-coniferous	DCS:4%, DCT:5%	DCS:4%, DCT:5%	n/a	n/a	n/a
4410	Particle board and similar board or wood or other ligneous materials, whether or not agglomerated with resins or other organic binding substances	5%	5%	n/a	n/a	n/a
4411	Fibreboard of wood or other ligneous materials. whether or not bonded with resins or other organic substances	5%	5%	n/a	n/a	n/a
4411.21.00	Not mechanically worked or surface covered	DCS:4%, DCT:5%	DCS:4%, DCT:5%	n/a	n/a	n/a
4411.29.00	Other	DCS:4%, DCT:5%	DCS:4%, DCT:5%	n/a	n/a	n/a
4411.3	Fibreboard of a density exceeding 0.35 g/cm3 but not exceeding 0.5 g/cm3	DCS:4%, DCT:5%	DCS:4%, DCT:5%	n/a	n/a	n/a
4411.9	Other	DCS:4%, DCT:5%	DCS:4%, DCT:5%	n/a	n/a	n/a
4412	Plywood, Veneered Panels and similar laminated wood	5%	5%	n/a	n/a	n/a
4412.22.90	Other with at least one outer ply of non coniferous wood - Other	DCS:4%, DCT:5%	DCS:4%, DCT:5%	n/a	n/a	n/a
4412.29.90	Other containing at least one layer of particle board - Other	DCS:4%, DCT:5%	DCS:4%, DCT:5%	n/a	n/a	n/a
4412.92.90	Other with at least one ply of tropical wood - Other	DCS:4%, DCT:5%	DCS:4%, DCT:5%	n/a	n/a	n/a
4412.99.90	Other containing at least one layer of particle board - Other	DCS:4%, DCT:5%	DCS:4%, DCT:5%	n/a	n/a	n/a

4413	Densified wood in blocks, plates, strips or profile shapes	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4414	Wooden Frames for paintings, photographs, mirrors or similar objects	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4415	Packing cases, boxes, crates, drums, and similar packings of wood; cable drums of wood; pallets, box pallets and other load boards, of wood; pallet collars of wood	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4416	Casks, barrels, vats, tubs and other coopers products and parts thereof of wood including staves	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4417	Tools, tool bodies, tool handles, broom or brush bodies and handles of wood; boot or shoe lasts and trees, of wood	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4418	Builders joinery and carpentry of wood including cellular wood panels, assembled parquet panels, shingles and shakes	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4418.10.00	Windows, French windows and their frames	CAN: Free	CAN: Free	n/a	n/a	n/a
4418.40.00	Shuttering for concrete constructional work	CAN: Free	CAN: Free	n/a	n/a	n/a
4418.90.00	Other	CAN: Free	CAN: Free	n/a	n/a	n/a
4419	Tableware and kitchenware of wood	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a

4420	Wood marquetry and inlaid wood; caskets and cases for jewellery or cutlery and similasr articles of wood statuettes and other ornaments of wood wooden articles of furniture not falling in Chap 94	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4421	Other articles of wood	5%, DCS:4%, DCT:5%	5%, DCS:4%, DCT:5%	n/a	n/a	n/a
4422	n/a			n/a	n/a	n/a
4423	n/a			n/a	n/a	n/a
4424	n/a			n/a	n/a	n/a
4425	n/a			n/a	n/a	n/a
Pre-fabricated Houses, a subsection under chapter 96	9406.00.00 - Prefabricated buildings	5%, CAN: Free	5%, CAN: Free	n/a	n/a	n/a
1/ Insert additional lines for Commodity tariff identification should tariffs vary within the four-digit designation						
for major products exported by the U.S. (e.g., 4412.19: softwood plywood 3%, 4412.XX: other plywood, 9%).						
2/ Calculate as tariff plus other import taxes/fees assuming a commodity value of $100.						
#Unless otherwise indicated NZ, PNG, FI and DC rates are Free						
DCS denotes the rate for countries and places listed in Part 2 of Schedule 1 to this Act						
DCT denotes the rate for HONG, RKOR, SING and TAIW						