

## Overview of Illegal Logging



Prepared for



Australian Government  
Department of Agriculture,  
Fisheries and Forestry

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Cover page: Raft of supposedly Illegal Logs on the Seruyan Rover near Tanjung Putting National Park, Indonesia; Source: Environmental Investigation Agency/Telepak

## PREFACE

The following report is provided to the Department of Agriculture Fisheries and Forestry and provides an overview of the estimated impact of illegal logging on Australian imports of forest and wood products.

The objective of the review is to address two issues; firstly to assess the current impact on the Australian forest product imports of the overseas trade in illegal or suspect forest products and secondly to assess what this impact could be in 5 to 10 years time.

The review provides estimates of the potential impact as accurate data does not exist and is unlikely to exist in the future. The review relies heavily on recent research carried out in the United States as well as Jaakko Pöyry Consulting's own perceptions of the problem and comments from those operating both within the Australian market and overseas.

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## SUMMARY

This overview of illegal logging has shown that forest products obtained either illegally or from suspect sources do enter Australia and the industry is concerned about it.

The actual volume and value of illegal harvesting around the world is impossible to assess accurately however credible evidence suggests that it is significant - potentially around USD22.5 billion.<sup>1</sup>

Jaakko Pöyry Consulting estimates that the impact of illegal logging influences around AUD400 million of Australia's forest products and wooden furniture imports which is around 9% of the total for these imports.

The major problem areas for Australia appear to be South-East Asia, particularly Indonesia and Malaysia and possibly China. There are two clear routes of illegally harvested products to Australia; firstly, direct from the source country and secondly, products that are shipped to another country for further manufacturing before being imported to Australia. It is more difficult to determine the origin of products that follow the latter route.

The major problems tend to be associated with developing countries or countries with economies in transition (few countries could state they are totally free of problems – even Australia). Demand and lack of awareness of the issue in the end use countries and the traders is also part of the problem.

The products that are affected are wooden furniture, paper and paperboard, wood based panels and sawnwood as well as miscellaneous products such as doors and mouldings.

In the future, Australia is likely to be self sufficient in paper and paperboard but import demand for sawntimber, miscellaneous wood products, specialty panels (thin plywood) and wooden furniture is likely to remain.

Australia can replace some of these imports from its own resources but not all and further reservations of Australian forests from production could exacerbate the imports of illegal or suspect products.

This study also determined that most importers do not have formal structures in place to provide any high degree of certainty on either the origin of their imports to Australia or whether it has all been obtained legally. At the retail level the awareness of the problem seems relatively low.

Most importers of note rely on long standing relationships with their overseas suppliers and they trust that their sources provide legitimate supplies.

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<sup>1</sup> Seneca Creek Associates, LLC & Wood Resources International, LLC 2004, "Illegal" Logging and Global Wood Markets: The Competitive Impacts on the U.S. Wood Products Industry' cited at [http://www.afandpa.org/Content/NavigationMenu/News\\_Room/Papers\\_Reports1/AFPIllegalLoggingReportFINAL2.pdf](http://www.afandpa.org/Content/NavigationMenu/News_Room/Papers_Reports1/AFPIllegalLoggingReportFINAL2.pdf), p.21

One importer contacted suggested that the supply market is becoming more complex as the forest industry is changing in Asia with more trading occurring both with primary products such as logs and in semi processed products such as sawntimber, mouldings, doors and furniture components. This increase in trade creates difficulties in determining the origin of products.

Certification at both the country and company level is seen as a potential solution. While acknowledging that some governments such as Indonesia have sustainable forest management policies and regulations, they have problems implementing them.

Trade restrictions or bans on imports are unlikely to be successful as Australia's impact on global and Asian demand is so small that illegal products would be directed to other markets. These bans would also adversely impact on the many traders who have been operating legitimately in this market and may inadvertently remove many products that do originate from plantations, sustainably managed natural forest or even recycled timbers (which are common in furniture).

A two staged approach is suggested; firstly, a market awareness of illegal products and the requirement of certification and secondly, to work with supplying countries and companies to develop and strengthen certification and chain of custody systems.

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## 1 INTRODUCTION

Illegal logging of forest products is known to occur in many countries throughout the world and is gaining increasing media attention and concern from both environmental groups and the industry alike.

This report aims to assess the impact of illegal or suspected illegal logging activities overseas on imports to Australia and suggest possible solutions. The report focuses on suspected illegal activity rather than unsustainable activities (which can be equally disastrous for the forest) due to the varying definitions of sustainable management. For instance, there are potentially unsustainable activities that are legal and even what is legal can be difficult to determine where harvesting is permitted but the wrong people are harvesting (i.e. they are stealing from the rightful harvesters).

‘Illegal logging’ can be defined in a number of ways for example:

- Harvesting without authority in national parks or conservation reserves
- Harvesting without authority
- Harvesting in excess of authority
- Failing to report harvesting activity to avoid royalty payments or taxes
- Misclassification of species or deliberate undervaluation
- Violation of international trading agreements such as the Convention on International Trade and Endangered Species (CITES).

The UN Food and Agricultural Organisation defined illegal logging as ‘*Timber harvesting-related activities that fail to respect national and sub-national laws and norms that regulate such harvesting*’.<sup>2</sup>

This report adopts the following definition for illegal logging:

*Harvesting either without, or in excess of authority or in some way avoiding full payment of royalty, taxes or charges.*

Illegal logging has environmental, social and economic impacts, for example:

- Uncontrolled illegal logging causes destruction of forests and loss of ecosystems and biodiversity and sustainable income for local communities
- Illegally sourced products in the marketplace causes unfair competition for those who adhere to the law and international trading rules
- Uncontrolled illegal logging perpetuates corruption and poor practices.

The following report provides a short summary of the global problem as identified by others in recent reports and then attempts to identify the impact on Australian forest product imports.

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<sup>2</sup> Guertin, C-E, ‘Illegal Logging: Overview and Possible Issues in the UNECE Region’, Presentation made to the Joint UNECE/FAO Workshop, September 2004, cited at <http://www.unece.org/trade/timber/docs/sem/2004-1/qweb.pdf>.

## 2 GLOBAL VIEW OF THE PROBLEM

Many studies have endeavoured to quantify the volumes of forest products being removed illegally from forests around the world. This is extremely difficult to do however, as accurate data is virtually impossible to obtain. The following table provides some insight from recent reviews by others on the problem of illegal harvesting.

**Table 2-1:  
Estimates Of Illegal Logging**

Organisation	Date	Estimates
Friends of The Earth – Indonesia (WALHI) <sup>3</sup>	15 /12/2004	<ul style="list-style-type: none"> <li>▪ 90% of all Indonesian timber in the current market is produced illegally</li> <li>▪ Indonesian timber is extremely difficult to identify and/or quantify.</li> </ul>
Environmental Investigation Agency (EIA) and Telepak <sup>4</sup>	04/02/2004	<ul style="list-style-type: none"> <li>▪ 39% of timber consumed in Malaysia is illegally cut from Malaysian forests or imported from Indonesia</li> <li>▪ Nearly double the volume of illegal Indonesian Ramin is being laundered through Johor Port and onto the world market than is legally produced in the whole of Malaysia.</li> </ul>
Environmental Investigation Agency (EIA) <sup>5</sup>	26/02/2004	<ul style="list-style-type: none"> <li>▪ Illegal logging accounts for over 70% of log production in Indonesia</li> <li>▪ Estimated 60% of the UK's total tropical timber imports are illegally sourced.</li> </ul>
Centre for International Forestry Research (CIFOR) <sup>6</sup>	2004	<ul style="list-style-type: none"> <li>▪ Illegal logging in Indonesia was about 64% of harvest in 2000 and 83% in 2001.</li> </ul>
World Wide Fund For Nature (WWF) <sup>7</sup>	11/04/2005	<ul style="list-style-type: none"> <li>▪ In some countries in South-East Asia, Africa and Latin America, up to 80% of all trees cut are done so illegally.</li> <li>▪ In Russia this figure is 50%.</li> </ul>
Greenpeace <sup>8</sup>	Date unknown	<ul style="list-style-type: none"> <li>▪ In PNG it is likely that all industrial logging is illegal.</li> <li>▪ A recent report on logging in Indonesia indicates that as much as 90% of logging is illegal.</li> </ul>
American Forest & Paper Association <sup>9</sup>	11/2004	<ul style="list-style-type: none"> <li>▪ Illegally produced roundwood represents between 12% and 17% of the volume of roundwood that enters international trade.</li> <li>▪ Illegal forest activity represents between 5% and 10% of global industrial roundwood production. This comprises of: <ul style="list-style-type: none"> <li>- 2% and 4% of softwood lumber and plywood</li> <li>- 23% and 30% of hardwood lumber and plywood</li> </ul> </li> </ul>

<sup>3</sup> WAHLI Indonesian Forum for Environment website, [http://www.eng.walhi.or.id/kampanye/hutan/jeda/logging\\_info/](http://www.eng.walhi.or.id/kampanye/hutan/jeda/logging_info/)

<sup>4</sup> Lawson, S 2004, 'Profiting From Plunder: How Malaysia Smuggles Endangered Wood' cited at <http://www.eia-international.org/cgi/reports/report-files/media67-1.pdf>

<sup>5</sup> Environmental Investigation Agency website, [http://www.salvonet.com/eia/cgi/news/news.cgi?a=191&t=template\\_search.htm](http://www.salvonet.com/eia/cgi/news/news.cgi?a=191&t=template_search.htm)

<sup>6</sup> Tacconi, L., Obidzinski, K., Aging, F. 2004, 'Learning Lessons to Promote Forest Certification and Control Illegal Logging in Indonesia' cited at [http://www.cifor.cgiar.org/publications/pdf\\_files/Books/BTacconi0401.pdf](http://www.cifor.cgiar.org/publications/pdf_files/Books/BTacconi0401.pdf)

<sup>7</sup> World Wildlife Fund for Nature website [http://panda.org/about\\_wwf/what\\_we\\_do/forests/problems/illegal\\_logging.cfm](http://panda.org/about_wwf/what_we_do/forests/problems/illegal_logging.cfm)

<sup>8</sup> Greenpeace website <http://www.greenpeace.org.au/resources/factsheets/pdfs/Forests.pdf>

In an attempt to gain some consistency in approach, this report has relied heavily on a research paper produced for the American Forest and Paper Association (AF & PA report) in November 2004 titled ‘*Illegal Logging and Global Wood Markets: The Competitive Impacts on the U.S. Wood Products Industry*’. This report was undertaken by Wood Resources International and Seneca Creek Associates who provide a relatively dispassionate view of the topic.

The AF & PA report selected five supplier countries and/or regions as well as three consuming countries and/or regions to illustrate the extent of the problem. The suppliers selected were Brazil, Indonesia, Malaysia, West/Central Africa and Russia while the consumers were China, Japan and Europe (EU-15). The conclusions in this report generally concur with Jaakko Pöyry Consulting’s understanding of the problem and the AF & PA global overview is a useful benchmark.

Of the countries that trade the most with Australia, the AF & PA report provided the following estimates.<sup>10</sup>

**Table 2-2:  
Reported Estimates of Illegal Logging Activities and Estimates of Production and Trade Derived from Wood Flow Analysis (and Field Research)**

Country/Region	Reported Estimates - % Illegal Forest Production and/or Imports	Suspicious Material Wood Fibre Flow Estimates (Selected Results)
Indonesia	70% - 80%	<u>Hardwood</u> 60% of production 100% of log exports 65% of lumber exports 55% of plywood exports
Malaysia	As high as 35% for illegal logging and 35% for illegal exports	<u>Hardwood</u> 5% of production 10% of log exports 70% of log imports
China	WWF2002 estimate was 32% of imports of timber, pulp and paper in 2000 were illegal	<u>Softwood</u> 30% of production 35% of log imports 17% of lumber imports 55% of plywood imports 32% of lumber exports 32% of plywood exports <u>Hardwood</u> 30% of production 32% of log imports 32% of lumber imports 56% of plywood imports 30% of log exports 31% lumber exports 31% plywood exports

<sup>9</sup> Seneca Creek Associates, LLC & Wood Resources International, LLC 2004, “Illegal” Logging and Global Wood Markets: The Competitive Impacts on the U.S. Wood Products Industry’ cited at [http://www.afandpa.org/Content/NavigationMenu/News\\_Room/Papers\\_Reports1/AFPIllegalLoggingReportFINAL2.pdf](http://www.afandpa.org/Content/NavigationMenu/News_Room/Papers_Reports1/AFPIllegalLoggingReportFINAL2.pdf)

<sup>10</sup> Ibid, p.11

Country/Region	Reported Estimates - % Illegal Forest Production and/or Imports	Suspicious Material Wood Fibre Flow Estimates (Selected Results)
W/C Africa	34% - 70% Gabon: 50% - 70% Cameroon: 50% Ghana: 34% - 60% Liberia: 80%	<u>Hardwood</u> 30% of production 30% of logs 30% of lumber
Other Asia	Papua New Guinea: 70% Myanmar: 50% Cambodia: 90% Laos: 45% Thailand: 40% Vietnam: 20% - 40%	<u>Softwood</u> 6% of production  <u>Hardwood</u> 20% of production
Brazil	20% - 90% (generally the higher estimates refer to illegal logging in Amazonia)	<u>Hardwood</u> 15% of production 15% of lumber exports 15% of plywood exports
Acceding EU	Latvia 20% Estonia 50%	<u>Softwood</u> 10% of production  <u>Hardwood</u> 10% of production

Source: AF & PA report November 2004

The AF & PA suggest the value of suspicious volumes in terms of global production of roundwood, lumber and plywood is around USD22.5 billion with the majority of this processed domestically, however around USD5 billion is traded internationally.<sup>11</sup>

While few countries can claim to be completely free of problems the majority of problems appear to emanate from countries with developing economies or economies in transition. The regions profiled in the AF & PA report account for nearly 80% of the above problem and value.

In summary, the AF & PA reports that there is 'credible evidence' to suggest that illegal logging of forest products represents around 5% to 10% of global industrial wood production<sup>12</sup> which is approximately 1.6 billion m<sup>3</sup>. This means that suspect products could range from 80-160 million m<sup>3</sup> (around 4 to 8 times the annual Australian consumption of forest products in roundwood terms).

As mentioned, most illegally produced timber is processed domestically and does not enter international trade. Of the volume of roundwood internationally traded, suspicious volumes are of the order of 12% to 17%. The analysis concludes that between 2% and 4% of softwood lumber and plywood and up to 23% to 30% of hardwood lumber and plywood traded globally could be of suspicious origin.<sup>13</sup>

The problem is obviously more acute in hardwood than softwood.

Of particular concern to Australia are its hardwood imports from the regions identified as having problems such as Indonesia, Malaysia and smaller nations that are struggling economically such as Papua New Guinea. These are reviewed in the following section.

<sup>11</sup> Ibid, p.21

<sup>12</sup> Ibid, p.19

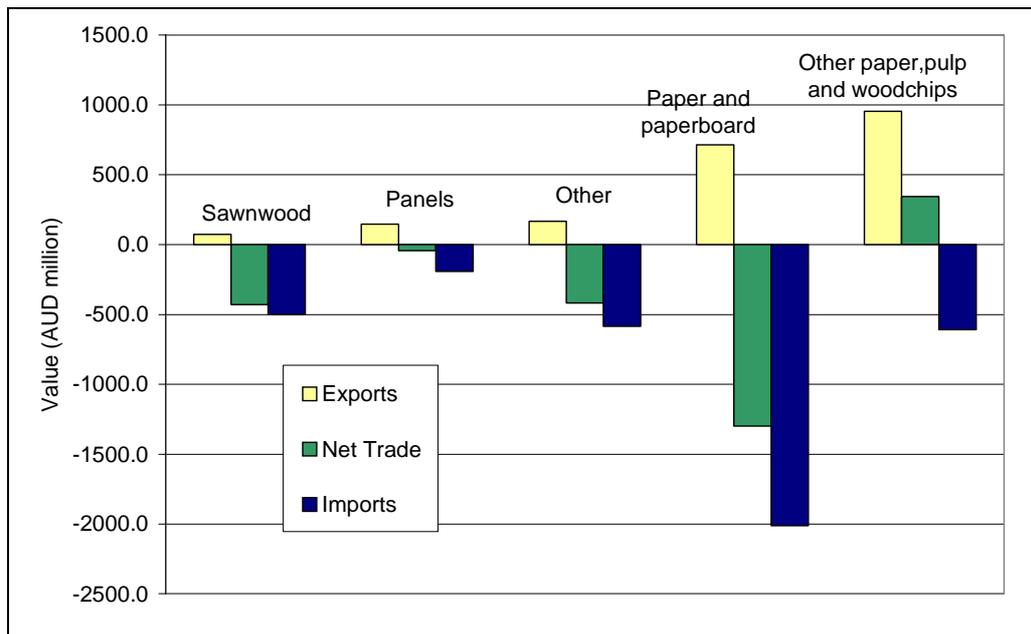
<sup>13</sup> Ibid, p.ES-1

### 3 AUSTRALIAN IMPORTS OF FOREST PRODUCTS

Australia still has a considerable trade deficit in forest products despite having a significant surplus in volume terms. In Australia, forest products are imported for two reasons; either the product is not manufactured domestically, or it is not manufactured in sufficient quantities to meet demand.

The following chart outlines the current status of these imports.

**Figure 3-1:  
Trade Balance of Forest Products in Australia 2003-04**



The main imports are for pulp and paper products, sawntimber and miscellaneous products (including doors, mouldings, parquet flooring and other wood products). The above figures do not account for the imports of wooden furniture which is between AUD750 million and AUD1 billion per annum.<sup>14</sup> The import of wooden furniture is second only to paper and paperboard and there are problems detecting the source of wood in these products. The following sections outline these imports in more detail and provide some indication of illegally sourced product entering Australia.

The AF & PA report provides a global view of the percentages of suspicious volumes in world trade of forest products. Therefore to provide a consistent view of the potential problems in Australian imports, the AF & PA percentages have been used to provide consistency between supplying countries. It is assumed Australia has an average likelihood of receiving illegal products from international trade. This assumption may not always be true as illegally sourced forest products may be biased towards particular countries rather than evenly spread. Given the obvious sensitivity of these numbers and the large potential

<sup>14</sup> ABARE suggests wooden furniture imports are \$750 million while the FIAA suggest it is closer to \$1 billion.

for error on a country basis, the volumes prescribed to each country have not been shown in this report.

### 3.1 Sawntimber

In 2003-04 imports of sawnwood products into Australia totalled more than 870 000 m<sup>3</sup> with a value of over AUD0.5 billion and represented around 13% of forest product imports. The following table outlines the top 25 sources of sawntimber imports to Australia. In volume terms, these represent 99.6% of the total imports and the top 10 represent 93% of total imports. In value terms, the top 10 imports also represent 93% of imports. Each country has been ranked in terms of perceived corruption and the government's ability and willingness to manage illegal logging.

**Table 3-1:  
Top 25 Sources of Sawntimber Imports to Australia 2003-04**

Country	Volume '000 m <sup>3</sup>	Value \$ '000	TICPI <sup>†</sup>	Governance and Management Capacity <sup>‡</sup>
1. New Zealand	435.81	255	Low	High
2. Canada	126.21	72	Low	High
3. Czech Republic	68.51	23	Med	High
4. Malaysia	54.57	39	Low	Med
5. Indonesia	43.82	34	High	Low
6. Papua New Guinea	22.34	13	High	Low
7. Austria	18.37	5	Low	High
8. Finland	18.31	9.6	Low	High
9. Chile	12.84	7.1	Low	Med
10. United States of America	12.77	12	Low	High
11. Estonia	10.84		Low	High
12. Germany	8.25		Low	High
13. South Africa	6.82		Low	High
14. Sweden	5.67		Low	High
15. Fiji	5.66		*	Med
16. Solomon Islands	5.58		*	Low
17. China	2.12		Med	Med
18. Ghana	1.60		Med	Med
19. France	1.53		Low	High
20. Brazil	1.46		Med	Med
21. Singapore	1.21		Low	Med
22. Ecuador	0.92		High	Med
23. Peru	0.84		Med	Med
24. Philippines	0.64		High	Med
25. Latvia	0.61		Med	Med
<b>Other</b>	<b>3.78</b>	<b>32.19</b>		
<b>Total</b>	<b>871.10</b>	<b>501.90</b>		

Source: JP Research, ABARE and ABS

<sup>†</sup> Values based on Transparency International Corruption Perceptions Index 2004 (TICPI)

<sup>‡</sup> JP Consulting's assessment of the countries governance and management capacity

\* Insufficient survey data for TICPI calculation

Jaakko Pöyry Consulting estimates that the amount of sawnwood that has been sourced illegally or from suspicious sources is around 8% of Australia's total sawnwood imports – or approximately 72 000 m<sup>3</sup> to the value of around AUD50 million.

### 3.2 Wood Based Panels

Wood based panels include reconstituted and solid wood panel products.

The reconstituted panels include Particleboard, Medium Density Fibreboard (MDF) and others such as Fibreboard and Hardboard. The solid wood group includes veneers and plywood.

The majority of imports of reconstituted products are from New Zealand and Malaysia where these products are produced from plantations - mainly radiata pine and rubberwood respectively. Some suspect material may be imported but it is likely to be relatively insignificant in value and volume terms.

The main source of potentially illegal products is in the solid wood based panels particularly plywood. The AF & PA report suggests that less than 4% of global softwood sawntimber and plywood and as much as 23% of hardwood sawntimber and 30% of hardwood plywood exports might be considered suspicious.<sup>15</sup> The high hardwood plywood figure is generally attributed to problems in Indonesia. Australia's imports of veneers are as follows:

**Table 3-2:  
Veneer Imported to Australia in 2003-04**

Country	Volume '000 m <sup>3</sup>	Value \$ '000	TICPI <sup>†</sup>	Governance and Management Capacity <sup>‡</sup>
Germany	0.62	2 255	Low	High
Indonesia	0.17	193	High	Low
Italy	0.87	2 167	Low	High
Malaysia	3.18	3 955	Low	Med
New Zealand	3.07	1 828	Low	High
Philippines	3.20	2 819	High	Med
Singapore	0.14	243	Low	Med
United States	0.95	3 257	Low	High
Other	3.15	6 340		
<b>Total</b>	<b>15.34</b>	<b>23 056</b>		

Source: JP Research, ABARE and ABS

<sup>†</sup> Values based on Transparency International Corruption Perceptions Index 2004 (TICPI)

<sup>‡</sup> JP Consulting's assessment of the countries governance and management capacity

<sup>15</sup> Op cit, p. ES-1

Australia's import of plywood is as follows:

Country	Volume '000 m <sup>3</sup>	Value \$m	TICPI <sup>†</sup>	Governance and Management Capacity <sup>‡</sup>
New Zealand	80.8	54.4	Low	High
Indonesia	36.5	21.7	High	Low
Malaysia	19.8	12.8	Low	Med
Germany	1.7	2.5	Low	High
Singapore	1.3	0.7	Low	Med
Other	36.2	20.8		
Total	176.3	112.8		

Source: JP Research, ABARE and ABS

<sup>†</sup> Values based on Transparency International Corruption Perceptions Index 2004 (TICPI)

<sup>‡</sup> JP Consulting's assessment of the countries governance and management capacity

Of the 320 000 m<sup>3</sup> of wood based panels imported into Australia during 2003/04, approximately 11% is suspected to be produced from illegally sourced material.

This percentage represents a value of around AUD23 million and is highest for veneer and plywood at 16% and 19% respectively.

### 3.3 Pulp and Paper

As mentioned in the introduction, the vast majority of illegally harvested product is processed domestically which means that secondary or semi processed products could have a far greater impact on Australia's imports of forest products.

The following section provides an outline of the imports of wood pulp and the four major paper and paperboard grades into Australia being Newsprint, Printing and Writing Paper, Tissue and Packaging.

#### 3.3.1 Wood Pulp

Due to closures at various processing facilities in Australia's pulp and paper mills (e.g. Burnie in Tasmania and Broadford in Victoria) there has been an increase in total pulp imports over the last decade. For instance, in 1994-95 total wood pulp imports were around 196 000 tonnes. In 2003-04 the volume was close to 377 000 tonnes.<sup>16</sup>

The main imports of wood pulp and comments on each source for 2003-04 are shown in Table 3-3.

<sup>16</sup> ABARE, Australian Forest and Wood Products Statistics, March and June quarters, 1995 & 2004

**Table 3-3:  
Sources of Wood Pulp Imports into Australia in 2003-04**

Country	Volume '000 m <sup>3</sup>	Value \$m	TICPI <sup>†</sup>	Governance and Management Capacity <sup>‡</sup>
Brazil	66	37	Med	Med
Canada	64	42	Low	High
Chile	56	33	Low	Med
Indonesia	31	18	High	Low
New Zealand	117	78	Low	High
Thailand	34	21	Med	Med
United States	6	5	Low	High
Other	3	2		
Total	377	236		

Source: JP Research, ABARE and ABS

<sup>†</sup> Values based on Transparency International Corruption Perceptions Index 2004 (TICPI)

<sup>‡</sup> JP Consulting's assessment of the countries governance and management capacity

Indonesia is the most likely country to have sourcing problems and it will depend on the mill in question and whether they are receiving any mixed tropical hardwood logs. While there may have been some historical problems in wood pulp imports, recent discussions with Australian processors suggest that they have virtually ceased all imports from Indonesia which means that it is unlikely that there are any significant wood imports from suspicious sources in this product category.

### 3.3.2 Paper Products

The major categories of paper imports are as follows:

#### Newsprint

The majority of newsprint imports are made from either softwood pulp from radiata pine plantations in New Zealand or from waste paper converted to newsprint in Asian mills in Korea or Indonesia. Therefore, there is no real likelihood of any suspect sources of wood in this product.

#### Printing and Writing Paper

Printing and writing paper is the major paper import to Australia and includes the main white office papers that are used for stationary and office printing. The main source of imports is Finland which has tight controls over harvesting its forests although it also imports logs from Russia where there could be sourcing problems. The second largest imports to Australia are from Indonesia which is probably the major source of potential illegal product entering Australia. Within Indonesia, the main integrated pulp and paper mills are using a mix of both plantation *Acacia mangium* and mixed tropical hardwood commonly referred to as MTH. The Indonesian government has legislated that these mills must convert to 100% plantation grown feedstock over time. This has not yet occurred however, even though Jaakko Pöyry Consulting understands the

deadline to stop using MTH is only a couple of years away. Like the sawntimber and plywood industries, any of the mills using MTH as feedstock will potentially have illegally sourced wood in their mix. As mentioned in the introduction, not all illegally harvested wood means the forest is not to be harvested. It can mean that the wrong harvesting contractor has illegally cut the trees down and then sold the wood to the pulpmill.

The estimated impact of suspected illegally harvested logs on the imports of printing and writing paper is around 4% in volume and value terms and represents around AUD56 million.

### **Tissues**

Indonesia is the main supplier of imported tissues and the potential for illegally harvested logs to enter these mills is the same as for printing and writing papers.

The other main supplier is New Zealand where production is for plantation grown radiata pine and well controlled. Some small volumes come in from Chinese Taipei and these could have illegally source logs in the feedstock but it depends on the source.

The estimated impact of suspected illegal activity on tissue imports is around 9% in value terms and around AUD11 million.

### **Packaging**

Most packaging products that enter Australia have a high level of recovered paper in their content and are mostly made of softwood pulp which excludes the more problematic tropical hardwoods. There could be some illegally sourced softwood from Russia entering China and general illegal wood entering the mix, however it would be relatively minor.

The estimated impact of illegal harvesting activity is around 1% or AUD3.3 million.

## **3.4 Miscellaneous Products**

Miscellaneous products contain a whole group of wood and wood related imports which are measured by value rather than volume. It includes products such as doors, mouldings, parquetry and engineered flooring panels, carpenters' pieces and cork and cooperage for the wine industry.

This sector has a potentially high level of illegal or suspect volumes as the majority of illegally harvested products are processed in the country of origin.

**Table 3-4:  
Sources of Doors Imported into Australia in 2003-04**

Country	Volume '000 m <sup>3</sup>	Value \$m	TICPI <sup>†</sup>	Governance and Management Capacity <sup>‡</sup>
Indonesia	157.9	23.4	High	Low
Malaysia	72.0	17.5	Low	Med
Other	22.3	8.3		
Total	112.4	46.1		

Source: JP Research, ABARE and ABS

<sup>†</sup> Values based on Transparency International Corruption Perceptions Index 2004 (TICPI)

<sup>‡</sup> JP Consulting's assessment of the countries governance and management capacity

**Table 3-5:  
Sources of Mouldings Imported into Australia in 2003-04**

Country	Value \$m	TICPI <sup>†</sup>	Governance and Management Capacity <sup>‡</sup>
Indonesia	37.1	High	Low
Italy	3.4	Low	High
Malaysia	33.7	Low	Med
New Zealand	2.0	Low	High
Singapore	0.9	Low	Med
Taiwan	0.4	Low	Med
Other	13.9		
Total	91.3		

Source: JP Research, ABARE and ABS

<sup>†</sup> Values based on Transparency International Corruption Perceptions Index 2004 (TICPI)

<sup>‡</sup> JP Consulting's assessment of the countries governance and management capacity

As these products are produced domestically, they are more vulnerable to being affected by illegal harvesting activity as the AF & PA report states the majority of illegally harvested logs processed in the country they are harvested in.

Given that these products also tend to be higher value, even small percentages of illegal activity have an impact on the import value.

The two areas that potentially have the highest problems are Indonesia and Malaysia. Ramin was a major import to Australia for mouldings and handles although since it has been listed under CITES it has dramatically reduced. Trade in this species, particularly illegal log export from Indonesia and then processing in Malaysia or other Asian ports, is a major concern.

The estimated impact of illegal harvesting in this sector has been assessed at around 14% of the value and around AUD83 million.

### 3.5 Wooden Furniture

The import of wooden furniture is not generally accounted for in Australia's balance of trade for forest products however it is significant being AUD1 billion in 2003/04.<sup>18</sup> Australia imports furniture from nearly 90 countries but the main ones are shown in the table below.

**Table 3-6:  
Sources of Furniture Imported into Australia in 2003-2004**

Country	% of imports	TICPI <sup>†</sup>	Governance and Management Capacity <sup>‡</sup>
China	43	Med	Med
Malaysia	13	Low	Med
Indonesia	7	High	Low
Italy	6	Low	High
Vietnam	4	High	Med
Taiwan	4	Low	Med
Others	23%		

Source: JP Research, ABARE and ABS

<sup>†</sup> Values based on Transparency International Corruption Perceptions Index 2004 (TICPI)

<sup>‡</sup> JP Consulting's assessment of the countries governance and management capacity

Jaakko Pöyry Consulting assessed a much wider list of nearly 90 countries supplying wooden furniture to Australia and estimated that the potential impact of illegal logging activity on imports (based on 2002/03 imports) was around 22% or AUD162 million. However the import data seems inconsistent which could represent a problem. In discussions with the Furniture Industry Association of Australia, they believe the above impact is possibly conservative.

### 3.6 Summary of Current Impact

The following summary of the potential impact of illegal or suspected illegal products into Australia in 2003/04 is around 9% of imports in value terms or around AUD 400 million. The main problem appears to be wooden furniture.

**Table 3-7:  
Potential Impacts of Illegal or Suspected Illegal Products into Australia, 2003-04**

	Volume '000 m <sup>3</sup>	Value \$m	Suspect %	Suspect Volume '000 m <sup>3</sup>	Suspect Value \$m
Sawnwood	871	494	8%	72	50
Miscellaneous forest products		584	14%	112	83
Wood based panels	327	191	11%	37	23
Paper and paperboard	1557	2014	1%	11	71
Paper manufactures		369	3%	na	11
Recovered paper	22	5	0%	0	0
Pulp	377	235	0%	0	0
Furniture		1000	22%		214
<b>TOTAL</b>	<b>Total</b>	<b>4893</b>	<b>9%</b>		<b>452</b>

<sup>18</sup> Hearne, I, FIAA facsimile, 27 April 2005

#### 4 AUSTRALIAN MARKET REVIEW

A combination of market testing and teleconferencing was undertaken to assess the level of awareness in the Australian market of illegal logging and what processes are in place to ensure legitimacy.

From discussions within the Australian marketplace with a range of importers, wholesalers, DIY companies and industry associations, there is no structured process to address the problem of detecting and restricting timber imports from illegal or suspect sources.

This includes products sourced directly from countries that have illegal activities and those that are manufacturing products for export but import their raw materials from suspect sources.

Conversely there seems to be little awareness at the retail level of the problem. Discussions with furniture retailers provided a variety of responses from defensive to total lack of awareness.

Of the larger DIY companies, Bunnings is trying to achieve some accreditation of their timber products but are finding this difficult. Other companies interviewed included Mitre 10 and Home Hardware which both operate on a franchise/co-operative style basis. Mitre 10 and Home Hardware try to assist with pricing but as such do not have any firm policy in relation to imported timber products - they tend to rely on their Australian wholesalers and importers to undertake this on their behalf.

From discussions in the market, sawntimber from suspect sources does enter Australia and it is often relatively easy to detect on the basis of lower price, poorer standard of finish and often in short lengths as many illegal harvesting operators do not have the heavy equipment to process and manage long log lengths although this is not always the case.

The Australian Timber Importers Federation is aware of and concerned about illegal logging. While they do have an environmental policy which expects members to source timber from legally and sustainably managed forests, they admit that they do not have either the resources or any sound mechanism to enforce it.

Most importers suggest that they have developed long-term relationships with their suppliers (e.g. in Indonesia) and believe they are making a genuine effort to supply legal products. Nevertheless they state that even these suppliers have difficulty in determining the source of their logs as they often buy from traders who barge or float logs over long distances and there is no proven method of determining the source.

At a presentation by the Malaysian Timber Council (MTC) in Melbourne, it was suggested that harvesting within Malaysia is extensively controlled. The MTC suggested the biggest problem for the Malaysians is product (logs or squared

flitch) being imported from other areas, undergoing primary or secondary processing in Malaysian mills and then being re-exported. The members of the Malaysian Timber Council are also aware that timber products pass through their Free Trade Zones which is an area over which they have no control.

In summary, the industry recognises a certification process is required to ensure importers can gain the confidence of knowing their products are legally sourced.

However the use of trade bans is not supported as a solution for a number of reasons:

- Firstly, the volumes that are imported by Australia are minor compared to the world trade and any bans would only re-direct the product elsewhere.
- Secondly, it tends to devalue the product in the source country which could inadvertently accelerate the destruction of some forest areas to convert it to other productive purposes.
- Thirdly, legitimate trade is important for the economic development of both countries and there are many legitimate traders operating in these regions utilising legal supplies from natural forests, plantations or even recycled timbers.

Importantly though, it is essential for the industry to recognise that if it cannot develop a constructive response to the problem of illegal logging then others will, such as the VicUrban Aurora program which provides advice on Eco Credits for new houses. In this program any use of rainforest timber whether from a sustainable and legal source or not is discouraged. This is a form of non tariff barrier and reflects an approach that others will take if the industry does not develop an effective measure of its own.

Jaakko Pöyry Consulting suggest that a joint country and company based certification based approach has the best potential for success. In the case of Indonesia for instance, it has modern forest systems and policies and large areas of reserves. Unfortunately what it lacks is the capacity to implement much of its policy and regulate it in the field.

A process of shifting to certification over a five year period for imported product is much more likely to succeed for both countries than a blanket trade restriction.

## **5 DISCUSSION AND POTENTIAL FUTURE IMPACT**

Jaakko Pöyry Consulting has been requested to provide a view as to the possible impact of illegal logging on forest product imports in 5 to 10 years time. This can be viewed from two perspectives; firstly, the Australian demand for imports and secondly, the capacity to supply products from illegal sources.

### **5.1 Future Australian Demand for Wood Product Imports**

The current negative trade balance as shown in Figure 3.1 is driven by three main product groups, Pulp and Paper Products, Sawntimber and Miscellaneous Products (Doors and Mouldings). Wooden Furniture which is not shown in this figure, is also a major import.

#### **5.1.1 Pulp and Paper**

The Pulp and Paper deficit is driven by demand for principally printing and writing papers and this deficit could be reversed by the construction of a world scale Bleached Hardwood Kraft Pulp (BHKP) mill with an integrated paper mill.

There is currently a proposal to construct a new BHKP mill in Tasmania by Gunns Ltd. If this mill proceeds, it can address Australia's shortage of pulp and if an integrated paper mill is also constructed then this would address Australia's demand for printing and writing papers.

There are two additional proposals for new pulpmills, one in Western Australia and one in the Green Triangle. If these mills proceed Australia will become a significant exporter of hardwood pulp and the need for imports will be significantly reduced.

#### **5.1.2 Sawntimber**

The principal end use of sawntimber is construction with around 70% being used for residential housing with the remaining 30% being utilised in furniture and fittings, non residential construction, packaging and other products.

The majority of construction timber is softwood and most imports of softwood are from legal and well controlled forest areas.

The problems in sawntimber imports are mostly with hardwood which is used for products like decking, mouldings and furniture (indoor and outdoor).

There has been a strong rise in the consumption of sawntimber since 2001 which has driven demand from a relatively stable level around 4.1 to 4.3 million m<sup>3</sup> to around 4.7 million m<sup>3</sup>. The reasons include a strong period of economic growth in the Australian economy, a rise in the level of immigration, low interest rates and increasing house prices which has fuelled a high level of investment housing. In addition, the federal and state tax structures have tended to

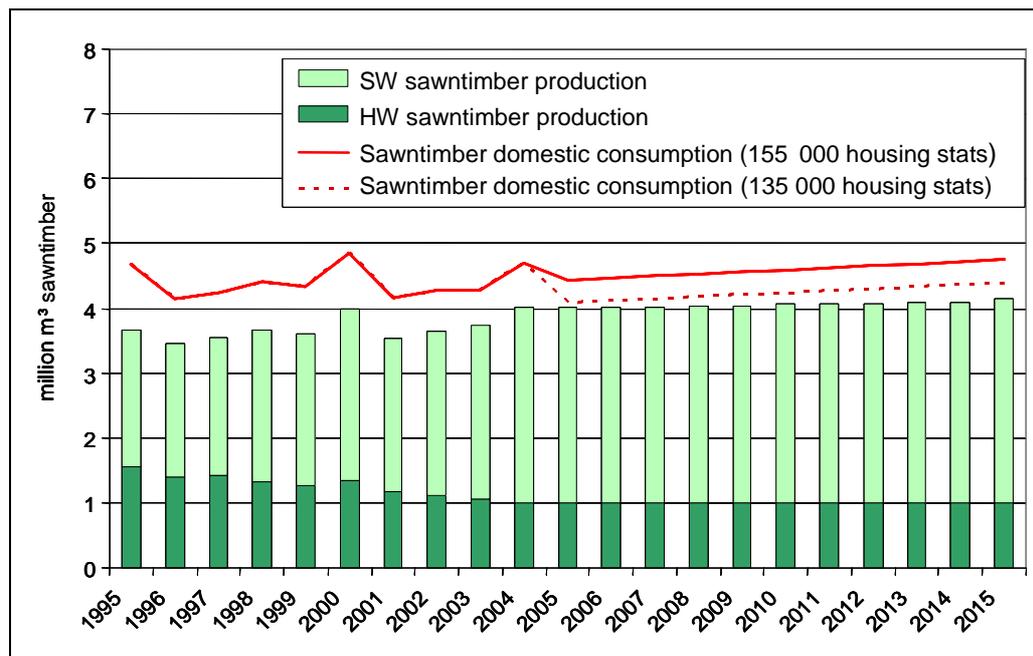
encourage alterations and additions to existing houses which now consume more sawntimber than new houses.

While it is difficult to assess whether this higher level of demand will remain, consensus forecasts suggest that a combination of economic growth, immigration and demographic movements will hold demand to this higher level and new housing starts at annual figure of around 150 000.

The net effect of this new demand level will mean that, with the projected small rise in softwood sawlog production, Australia is unlikely to become self sufficient in sawntimber production in the next 10 years. Imports are likely to remain a feature of the Australian timber supply.

Figure 5-1 illustrates two scenarios for consumption based on two sets of housing start figures (155 000 and 135 000). Figure 5-1 illustrates that even at the lower bound of 135 000 house starts Australia is unlikely to become self sufficient in sawntimber.

**Figure 5-1:  
Domestic Supply and Demand of Sawntimber**



Expansion of the softwood estate has slowed dramatically which means the softwood harvest volume will plateau at least in the short-term. If natural forest harvesting decreases further then this will require more imports to meet demand or the Australian timber industry will lose market share to substitutes.

Production from natural forests in Australia has decreased steadily over the past decade as a result of the creation of new reserves and changes to allowable harvest volumes.

While the harvest volumes of natural forest decrease, the domestic demand for hardwood is expected to remain at current levels or even increase. Therefore the

demand for hardwood imports is likely to strengthen in order to meet domestic demand, bringing with it an increase in the imports of illegal timber and timber products.

Australian hardwood timbers are largely utilised for their durability, strength and appearance. Typical durability uses include house stumps, fencing, decking and outdoor furniture; strength uses are generally beams for construction and appearance products are furniture and flooring.

Table 5-1 lists some of the hardwood timber species currently being imported into Australia and their most common uses. It also lists some Australian options.

**Table 5-1:  
Imported Timbers and Possible Replacement Timbers**

Imported Species	Use	Replacement
Meranti	Mouldings, joinery	S3 species such as silvertop ash messmate flooded and rose gum bush box hoop & radiata pine
Kwila/Merbau	Flooring, decking, outdoor furniture,	S2 species such as blackbutt river red gum spotted gum cypress pine
Keruing	Flooring, framing, boards, joinery, mouldings, lining, panelling	S2 species such as above
Selangan batu	Decking, flooring, door and window sills	S2 species such as above
Gaboon/okoume	Plywood, joinery, furniture	S4 species mountain ash alpine ash messmate
African mahogany	Furniture, veneer, panelling, joinery	S4 species as above
Obeche (West African Gaboon)	Plywood, joinery, furniture	S4 species as above
Mersawa	Plywood, flooring, general construction	S4 Species as above

Not all sawntimber imports need to be or should be replaced as constructive and legal trade between Australia and other countries develops the economies of each country. Imported timbers also have some distinctive features that are not found in local products.

However with some technical research and development Australia can develop some very competitive products that could replace some of the imports and remove the possibility of losing market share to imports.

### **5.1.3 Wood Based Panels**

In the case of wood based panels, Australia is more or less self sufficient in gross terms but the majority of imports are for specialty products such as thin hardwood plywood for furniture and panelling and hardwood formply for concrete formwork. These products are difficult to replace with current technology although there is potential to develop replacement products from the extensive Managed Investment Scheme (MIS) plantations. It is unlikely that there will be any major change in imports of these products in the short-term.

### **5.1.4 Wooden Furniture and other Products**

Wooden furniture imports have been growing strongly in recent years and it is unlikely to slow. Doors, mouldings and other miscellaneous products can be made in Australia but any components with a high labour content will most likely be cheaper to produce offshore. Demand for imports is most likely to continue. Certification, while difficult with these types of product, must be part of the answer.

This product sector creates the biggest problem in preventing illegal wood imports. A concerted effort in requiring certified products will be needed to ensure all components come from legal and well controlled resources.

## 6 CONCLUSIONS

In Australian import terms, the potential volume of illegally sourced forest and wood products is around AUD400 million or around 9% of the total import bill.

The major contributors to this figure are wooden furniture, miscellaneous wood products (doors, mouldings etc), paper and paperboard, sawntimber and wood based panels.

Illegally harvested products not only contribute to forest destruction, but also artificially lower prices which create a disadvantage for legal operators.

There is credible evidence that the problem exists. The AF & PA have assessed it to be a global production problem of around USD22.5 billion, around USD5 billion in international trade.

Based on current literature, media and personal contacts, Indonesia is having the most difficulty controlling this problem and it is costing them dearly in lost revenue and damage to their environment.

Other problem areas are in Asia, in particular Malaysia and China.

A review of the Australian market found no formal structures in place to prevent the import of illegally sourced products.

In the future, Australia is likely to be largely self sufficient in reconstituted wood based panels and pulp and paper products. It will continue to import sawntimber and associated products and wooden.

Certification of companies supplying Australia is possibly the best approach although not all certification is proving to be good certification as Governments particularly in Indonesia have problems implementing and regulating their forest policies.

For this reason, and the heterogeneity of conditions that lead to illegal logging activity, government to government cooperation is necessary to assist the development of credible certification systems.

Trade is good for countries as it can supply products that each do not produce themselves however it should not allow illegal activities to gain a price advantage over legal operators

## REFERENCES

ABARE 2004, *Australian Forest and Wood Products Statistics*, March and June quarters 2004, Canberra

ABARE 1995, *Australian Forest and Wood Products Statistics*, March and June quarters 1995, Canberra

Environmental Investigation Agency, '*Environmentalists Applaud UK-Indonesia Agreement to Combat Illegal Logging*' cited at [http://www.salvonet.com/eia/cgi/news/news.cgi?a=191&t=template\\_search.htm](http://www.salvonet.com/eia/cgi/news/news.cgi?a=191&t=template_search.htm)

Greenpeace, '*Saving Forests*' cited at <http://www.greenpeace.org.au/resources/factsheets/pdfs/Forests.pdf>

Guertin, C-E, '*Illegal Logging: Overview and Possible Issues in the UNECE Region*', presentation made to the Joint UNECE/FAO Workshop, September 2004, cited at <http://www.unece.org/trade/timber/docs/sem/2004-1/qweb.pdf>.

Lawson, S 2004, '*Profiting from Plunder: How Malaysia Smuggles Endangered Wood*' cited at <http://www.eia-international.org/cgi/reports/report-files/media67-1.pdf>

Seneca Creek Associates, LLC & Wood Resources International, LLC 2004, '*“Illegal” Logging and Global Wood Markets: The Competitive Impacts on the U.S. Wood Products Industry*' cited at [http://www.afandpa.org/Content/NavigationMenu/News\\_Room/Papers\\_Reports/1/AFPIllegalLoggingReportFINAL2.pdf](http://www.afandpa.org/Content/NavigationMenu/News_Room/Papers_Reports/1/AFPIllegalLoggingReportFINAL2.pdf)

Tacconi, L., Obidzinski, K., Aging, F. 2004, '*Learning Lessons to Promote Forest Certification and Control Illegal Logging in Indonesia*' cited at [http://www.cifor.cgiar.org/publications/pdf\\_files/Books/BTacconi0401.pdf](http://www.cifor.cgiar.org/publications/pdf_files/Books/BTacconi0401.pdf)

WAHLI Indonesian Forum for Environment, '*Illegal and Destructive Logging*' cited at [http://www.eng.walhi.or.id/kampanye/hutan/jeda/logging\\_info/](http://www.eng.walhi.or.id/kampanye/hutan/jeda/logging_info/)

World Wildlife Fund for Nature, Problems: '*Illegal logging and forest crime*' cited at [http://panda.org/about\\_wwf/what\\_we\\_do/forests/problems/illegal\\_logging.cfm](http://panda.org/about_wwf/what_we_do/forests/problems/illegal_logging.cfm)

## **APPENDIX 1**

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### **Summary of Imports by Product**

Products	Volume	Value		2003-2004 Figures				
		'000 m <sup>3</sup>	\$m	% suspect	Suspect Volume	Suspect Value		
		'000 m <sup>3</sup>	\$m		'000 m <sup>3</sup>	\$m		
Roundwood		1.7		1.1	29%	0.5	0.3	
Sawnwood								
<b>Total</b>		<b>871.1</b>	<b>493.7</b>	<b>8%</b>	<b>71.8</b>	<b>50</b>		
Miscellaneous forest products								
Doors		252.2	49.098	45%	112.4	17.7		
Mouldings			91.3	32%	0.0	29.0		
Others			443.1	11%	0.0	48.0		
<b>Total</b>			<b>583.5</b>	<b>16%</b>	<b>112.4</b>	<b>94.7</b>		
Wood based panels								
Veneers		15.3	23.1	16%	2.4	3.3		
Plywood		176.3	112.8	19%	33.4	19.7		
Particleboard		66.9	16.4	1%	0.8	0.2		
Hardboard		12.8	10.7	0%	0.0	0.0		
Medium density fibreboard		47.3	23.0	0%	0.1	0.1		
Softboard and other fibreboards		8.0	4.8	1%	0.1	0.1		
<b>Total</b>		<b>326.6</b>	<b>190.8</b>	<b>11%</b>	<b>36.8</b>	<b>23.4</b>		
Paper and paperboard								
Newsprint		303.9	261.4	0%	0.8	0.6		
Printing and writing		1 014.6	1 330.0	3%	0.8	43.6		
Household and sanitary		84.6	137.9	7%	5.7	8.1		
Packaging and industrial		154.1	283.7	1%	2.2	3.6		
<b>Total</b>		<b>1 557.3</b>	<b>2 013.6</b>	<b>1%</b>	<b>9.5</b>	<b>55.9</b>		
Paper manufactures b	<b>Total</b>		<b>369.0</b>		<b>0.00</b>	<b>7.99</b>		
Recovered paper	<b>Total</b>	<b>22.1</b>	<b>4.7</b>	<b>0%</b>	<b>0.00</b>	<b>0.00</b>		
Pulp	<b>Total</b>	<b>376.6</b>	<b>235.1</b>	<b>2%</b>	<b>6.32</b>	<b>3.70</b>	25	46.8
Woodchips	<b>Total</b>	<b>0.9</b>	<b>1.4</b>	<b>2%</b>	<b>0.02</b>	<b>0.03</b>	<b>67.6</b>	
Furniture	<b>Total</b>		<b>746.9</b>	<b>22%</b>		<b>161.89</b>	50	80.5
<b>Total</b>	<b>Total</b>		<b>4 639.8</b>	<b>9% Illegal Sources</b>		<b>397.6</b>		

Sources

- 1 Tacconi, L.; Obidzinski, K.; Agung, F. 2004. Learning lessons to promote forest certification and control illegal logging in Indonesia. CIFOR, Jakarta.
- 2 Gerrard, N.; Ozinga, S. 2004. Illegal logging: room for manoeuvre by EU Governments. Fern report
- 3 "Illegal" logging and global wood markets: the competitive impacts on the U.S. Wood products industry. 2004. Prepared for the American Forest and Paper Association

Assumption for non-timber products take a fixed percentage 20%  
China and others 15%