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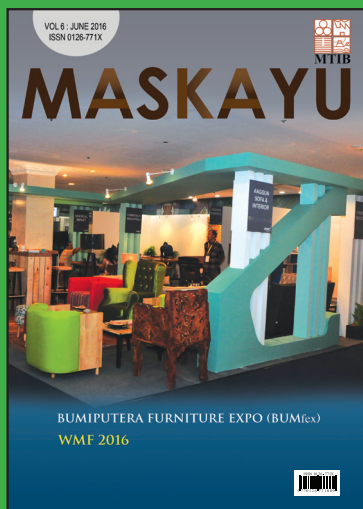
BUMIPUTERA FURNITURE EXPO (BUM_{fex})
WMF 2016

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Cover : Furniture from Anggun Sofa & Interior displayed during Wood & Lifestyle Fair 2016, PWTC.

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BUMIPUTERA FURNITURE EXPO (BUMfex)



YB Dato' Suraya Yaacob, Kedah EXCO member (second from right) presenting a cheque to a representative from Nasir Decoration Sdn. Bhd. The company won the Best Booth during the exhibition.

The Bumiputera Furniture Expo (BUMfex), organised by MTIB for the eighth year, was held from 20 May to 2 June at TESCO Mergong, Kedah. Timber products ranging from home furniture, garden furniture and ID services were displayed for sale. A total of 20 SMEs from Perlis, Kedah and Penang participated in the event.

In line with one of MTIB's objectives, that is to facilitate and strengthen the development of SMEs, the objectives of this two-week event were:

- Promoting products and services by Bumiputera entrepreneurs to domestic consumers
- Increasing the market share of the products and services of Bumiputera entrepreneurs

- Raising consumer awareness on the benefits of wood, and its aesthetic and inherent properties and value compared to other materials

The fair was also an avenue for SMEs to showcase their products and provide an inroad to access retail outlets as well as participate in premium contracts with the corporate sector and residential developments.

The BUMfex was officiated on 27 May by YB Dato' Suraya Yaacob, Kedah EXCO member and was targeted at

consultants, contractors and interior designers, property developers, Government agencies, the corporate sector and the general public. Apart from showcasing and promoting timber products, demonstrations on wood carving and consultations on technical services were also held during the fair.

Some of the SMEs were first timers as they had never participated in any furniture fair before. For these new exhibitors, their objective of participation was to gain knowledge and exposure with respect to marketing furniture in the domestic market. The exhibitors received very encouraging feedback and numerous enquiries were made on the products. More than 26,000 visitors visited BUMfex while RM2 million worth of sales were recorded by the companies.



A group photo at one of the booth.



At the ABM Two Sdn. Bhd booth.



INDONESIA

SLVK to Be Acknowledged as FLEGT License for Wood Products

According to Agus Justianto from the Ministry of Environment and Forestry, the European Union plans to amend the wood marketing regulations due to the acknowledgment of the wood legality verification system (SLVK) as a Forest Law Enforcement, Governance and Trade (FLEGT) license. With the acknowledgment of SLVK as a FLEGT license, all wood products from Indonesia no longer need to go through the due diligence stage, which is time consuming. The licensing is valid in all 28 countries under the EU. The Indonesian government has earlier, in April 2016, implemented the SLVK as an export requirement for all exports from its forestry industry.

Bisnis Indonesia, 4 June

VIET NAM

USD2.58 Billion Wooden Products Exported in First Five Months

Viet Nam exported USD2.58 billion (EUR2.27 billion) of wooden products in January-May 2016. This was a 2.08% increase compared to the same period in 2015. The figures were revealed by Viet Nam's Industry and Trade Ministry. In 2016, the nation will register exports of wooden products worth USD7.2 billion worth. This is an increase compared to the USD 6.9 billion in 2015. The projection was revealed by the Handicraft and Wood Industry Association of Ho Chi Minh City.

Viet Nam News, 10 June

CHINA

Imported Laminated Flooring is Popular Amongst Young Consumers

According to a recent market survey young Chinese consumers prefer imported laminated flooring over domestic products. The main reason cited for this preference was the wide choice of colours especially if available in 'pavement' styles, even at the expense of foot comfort. Another reason for the preference for imported laminated floorings was convenient installation as imported laminated flooring can be glue-less with an interlocking slot design which makes it easy for consumers to install it by themselves. Consumers also reported that imported laminated flooring is durable and has better anti-slip features than domestic flooring. Prices for imported laminated flooring are considered reasonable for

many middle class Chinese. Current retail prices for imported laminated flooring are in the region of RMB3-700/panel, well down on the RMB8-1,000/panel seen in 2012.

ITTO, 15 June

INDIA

Anti-dumping Duties (AD) Imposed on Viet Nam and Indonesian MDF Producers

An announcement on the final decision of the AD investigation on plain medium density fibreboard (MDF) imported from Indonesia and Viet Nam has been announced by the Indian Directorate General of Anti-Dumping and Allied Duties (DGAD). According to DGAD, the local production sector was substantially affected by imported products from Viet Nam and Indonesia. The DGAD made a decision that the three Vietnamese producers and exporters that fully cooperated and provided answers to its questions were to be imposed with imposed dumping margins of 0% to 15%, while the others were imposed with dumping margins of 40% to 50%, said the Viet Nam Competition Authority (VCA). Anti-dumping duties will be applicable in five years. Duty below the minimum level is enjoyed by one Vietnamese business, while the other two will see duties of USD14.84 (EUR 13.06) per m³ and USD15.95 per m³. The anti-dumping lawsuit on MDF products was lodged by India after complaints of Mangalam Timber Products and Greenply Industries. Besides that, duties for other businesses from Viet Nam and Indonesia stood at USD63.99 per m³ and USD64.35 per m³ respectively.

VIR - Vietnam Investment Review, 9 June

JAPAN

Office Furniture Imports Grew

Imports of office furniture in April 2016 were up 14.5% but compared to the previous month there was a slight drop in the value of imports. China continued as the major shipper of wooden office furniture to Japan. The relative position of the second and third ranked suppliers switches between Portugal, Poland and Italy every month. In April 2016 Portugal was ranked second followed by Poland. In March this year Italy was ranked second followed by Poland. Despite the good performance of Portugal, Italy and Poland shippers in Asia accounted for the bulk of shipments of office furniture to Japan (64% in April 2016). The top three suppliers accounted for almost 80% of Japan's wooden office furniture imports but China saw its share of imports drop 22% from a month earlier and

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there was a spike in imports from Portugal. Portugal accounted for 16% of April imports.

ITTO, 15 June

JAPAN Housing Starts Drop

Housing starts in Japan increased by 9.8% year-on-year to 78,728 units in May of 2016, following a 9.0% growth in April, beating market expectations of a 4.8% rise. It is the fastest growth since June 2015, supported by dwelling of rental housing (+15.0% to 32,427 units), multi-units (+7.9% to 22,213 units) and individual houses (+4.3% to 23,501 units).

Tradingeconomic.com, June

EUROPEAN UNION Construction Output Shrank

Construction output in the Euro Area shrank 0.5% year-on-year in March of 2016, the first decline since September last year as civil engineering fell by 2.9% while building construction edged up 0.1%. In February, construction output grew an upwardly revised 3.4% while it was 4.9% in January. On a monthly basis, construction fell 0.9%. Construction output in the Euro Area averaged -0.80% from 1996 until 2016, reaching an all-time high of 18% in February of 2000 and a record low of -22.40% in February of 1996. Construction output in the Euro Area was reported by the Eurostat.

Tradingeconomic.com, June

FINLAND Food Industry Interested in Utilising Wood-derived Ingredients

In Finland, the food industry is interested in utilising wood-derived ingredients. They could be utilised in the manufacture of products such as yoghurt and meat products. Some wood-derived ingredients, such as xylitol, have been used as food additives for many years. According to VTT Technical Research Centre of Finland, wood-derived ingredients enhance the texture and smoothness of yoghurt. They also improve the stability of the texture. Xylan, a hemicellulose extracted from Birch pulp, breaks down slowly in the in vitro colon model and is therefore unlikely to cause flatulence, in contrast to commonly used fructans.

Maaseudun Tulevaisuus, 8 June

POLAND Furniture Tops List for Most Export Growth Potential

A TOP50 2016 ranking produced by Bank Zachodni WBK shows the 50 exporting industries in Poland which have the greatest potential of increasing overseas sales. In first position are furniture and furnishing accessories, which scored 75 points out of a maximum of 100 in the ranking. Furniture exports rose by 7% year-on-year in 2015 and are predicted to be worth possibly EUR9 billion (USD10.23 billion) in 2016. In second place in the table with 60 points are products made of cereal, milk or flour, exports of which rose by 20.7% in 2015 and which are seen to have great potential for growth. In third place with 55 points are furs. Poland is the leading exporter of furs in Europe with an estimated 750 farms in existence and the industry is rapidly expanding. In 2015 its fur exports were worth almost PLN1.70 billion (EUR387.34 million/USD440.28 million).

Bankier.pl, 7 June

RUSSIA Softwood Roundwood Exports May be Banned for Five Years

A bill to ban softwood roundwood exports for five years may be submitted for consideration by the State Duma. Penalties may be introduced for violation of the rules: RUB50,000-100,000 for officials, RUB300,000-500,000 for entrepreneurs without a legal entity and RUB0.5-1 million for legal entities. In all cases the timber will be attached. The ban on exports of unprocessed (round) softwood will help to gradually increase the available wood processing capacity in Russia and to create more jobs. The adoption of the project will significantly reduce illegal exports of round timber as well as replenish the state budget thanks to sales of wood products with higher added value.

Bumprom, 3 June

BRAZIL Wood Product Exports Revenue Rise

Brazil's export of wood-based panels tripled between January and April 2016 amounting to 269,000 m³ compared to 86,000 m³ exported in the same period in 2015. Pulp export between January to April grew 16.7% year-on-year and paper export increased 7.8% over the same period. Total earnings from wood-based panel, pulp and paper exports between January-April 2016 amounted to USD2.6 billion, a 7.3% increase compared to




Standing on Excellence



MTIB is committed towards enhancing the sustainable growth of the Malaysian timber industry through various initiatives and innovations.

For more information, contact:

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facebook.com/pages/Malaysian-Timber-Industry-Board

Spot the difference

They look similar, are made from the same type of hardwood and have similar price tags. The only difference is that one came from a rainforest and the other from a plantation.

Every year, millions of trees are felled to fulfill the demands of the timber industry. Problems arise when these trees are not replaced as fast as they are taken, causing a multitude of environmental problems.

MTIB is fully aware of the need for renewable resources. One solution is forest plantation, where trees are planted specifically for commercial purposes. Not only does it provide a steady supply of timber, it also works to the advantage of our environment.

We care about the environment as much as we care about the timber industry, which is why it is important for us to come up with solutions that benefit both – because beautiful furniture doesn't have to come with a high environmental price tag.

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the same period in 2015. Domestic sales of wood-based panels totalled 2.1 million m³ in the first four months of 2016, some 8% lower compared to the same period last year.

ITTO, 15 June

CANADA

Housing Starts Trend Declines

The trend measure of housing starts in Canada was 191,000 units in May compared to 194,950 in April, according to Canada Mortgage and Housing Corporation (CMHC). The trend is a six-month moving average of the monthly seasonally adjusted annual rates (SAAR) of housing starts.

"Housing starts slowed in May, and are now on pace to reach 191,000 units in Canada — falling within the upper range of our housing market outlook forecast for the year," said Bob Dugan, CMHC Chief Economist. "The decline we see in the trend is led by fewer multiple starts in urban areas, particularly in larger centres like Toronto."

The standalone monthly SAAR for all areas in Canada was 188,570 units in May, down from 191,388 units in April. The SAAR of urban starts decreased by 2.5% in May to 170,432 units. Multiple urban starts decreased by 5.7% to 110,834 units in May and the single-detached urban starts increased by 4.2% to 59,598 units.

In May, the seasonally adjusted annual rate of urban starts decreased in British Columbia and the Prairies, but increased in Ontario, Atlantic Canada, and Québec.

Source: CMHC/Fordaq, June

CHILE

Forestry Exports Down 1.8% in First Four Months

Chile's forestry exports dropped 1.8% to USD1.78 billion (EUR1.57 billion) in the first four months

of 2016, compared with exports in the same corresponding period last year, according to data from Infor. Growing demand from China and the US was not enough to boost exports during the period that were affected by lower prices compared to 2015. Of a total of 20 products assessed by Infor, only one, bark-less Eucalyptus chips, saw an annual rise in cost - a modest 0.6%. The other 19 products saw price reductions. Despite the economic slowdown in China, forestry exports to that country rose 13% year-on-year to USD467.07 million in the first four months of 2016. The same exports to the US climbed 3.4% to USD280.47 million. Both markets concentrated 42% of Chile's forestry exports. Chile's forest industry chamber Corma expects the sector's exports to hit USD5.4 billion this year, which is the same amount recorded in 2015. Corma believes that all negative effects may stabilise throughout the year and highlights that some long-fibre pulp producers were trying to increase their prices, although timidly, at the moment.

El Mercurio, 8 June

UNITED STATES

Recovery in Wooden Furniture Imports

Following a significant drop in wooden furniture imports in March, US imports largely recovered in April. Wooden furniture imports were worth USD1.27 billion in April, up 5% year-to-date. Much of the month-over-month growth was in imports from China (USD555.1 million, +40%) and Viet Nam (USD239.7 million, +33%). Mexican shipments were slightly up in April, while imports from Canada, Malaysia and Indonesia declined. Wooden furniture imports from India decreased 23% to USD18.4 million in April, but year-to-date were up 17%. Imports of all types of wooden furniture grew in April. Imports of upholstered furniture increased the most, followed by 'other' furniture and kitchen furniture.

ITTO, 31 June



Jelutong Dyers logo

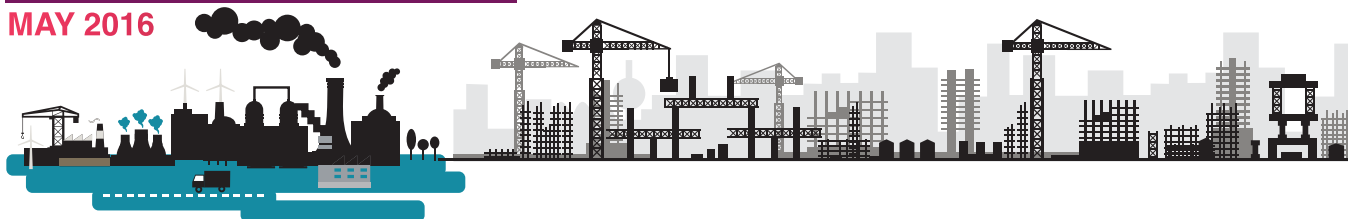
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MAY 2016



Malaysia: PTP Establishes VTMS and MRMS

With the establishment of Vessel Traffic Monitoring and Information System (VTMIS) and Marine Resource Management System (MRMS), Port of Tanjung Pelepas (PTP) continues to increase efforts toward becoming a green port and providing advanced vessel traffic monitoring process. Environmental sustainability is well-acknowledged in the port's governing policies, said PTP's acting CEO, Johannes De Jong. The systems have the ability to decrease the company's carbon footprint. Besides that, the systems are also able to offer information on dynamic weather conditions and provide real-time vessel status information to all customers. Therefore, decisions can be taken in an effective manner. Furthermore, the systems could enhance the safety and security of vessel navigation within the PTP terminal.

Source: New Straits Times, 4 May

in 2016, disclosed by Datuk Seri Che Khalib Mohamad Noh, Group Managing Director. In the meantime, MMC is considering listing its logistics and port operation units on the local bourse, while the company is also exploring opportunities for takeover of port businesses in and outside Malaysia.

Source: The Sun Daily, 11 May

Malaysia: KMB Seaport to Manage Tanjung Bruas Port for 30 years

KMB Seaport of Malaysia has entered into a concession deal with the Federal Government and Malacca Port Authority for the management of the Tanjung Bruas Port. KMB Seaport intends for the port to turn into an efficient and upgraded facility, especially for industries in Malacca. The company also intends to purchase modern equipment in order to upgrade current port facilities. KMB Seaport will be managing Tanjung Bruas Port for 30 years.

Source: New Straits Times, 25 May

Malaysia: Growth Plan for Utilities, Infrastructure Businesses Unveiled by MMC

Utilities and infrastructure developer MMC of Malaysia will place its business focus on development of industrial land and port operations

Shipments of Timber and Timber Products through Ports in Peninsular Malaysia, May 2016

Products	Port Klang		Kuantan		Pasir Gudang		Tanjung Pelepas		Penang		Total all Ports m ³	% Change May 2016/ Apr 2016
	m ³	% Change May 2016/ Apr 2016	m ³	% Change May 2016/ Apr 2016	m ³	% Change May 2016/ Apr 2016	m ³	% Change May 2016/ Apr 2016	m ³	% Change May 2016/ Apr 2016		
Sawntimber	61,236	2	7,538	395	1,286	-8	282	-60	9,298	32	79,640	13
MDF	34,015	0	0	0	10,555	9	5,065	-7	15,731	-24	65,366	-7
Mouldings	12,337	10	159	-40	1,944	4	635	50	1,646	11	16,721	10
Plywood	8,694	13	47	100	0	-100	159	54	9,229	-1	18,129	6
Veneer	371	40	6	-33	0	100	40	38	690	-9	1,107	3
Particleboard	34,899	36	616	199	451	43	18	125	3,681	-18	39,665	30
TOTAL	151,552	9	8,366	308	14,236	7	6,199	-7	40,275	-8	220,628	8

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MAY 2016

United States: OCEMA, Six Major Ports to Find Container-weighting Safety Measure Solution

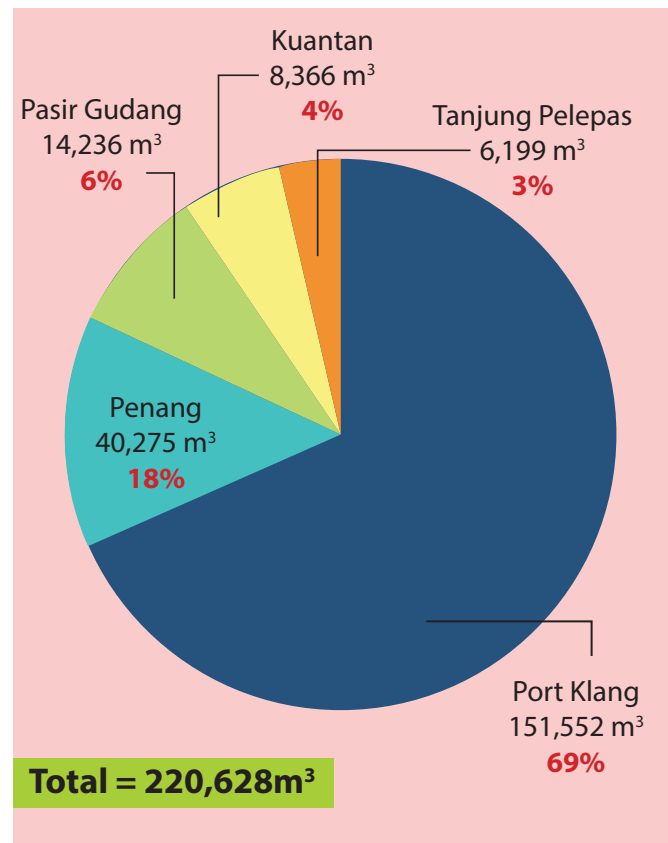
In the US, the organisation representing ocean carriers, Ocean Carrier Equipment Management Association (OCEMA) will be working with six major ports to come up with a common solution to comply with the container-weighting safety measures adopted by the United Nations' International Maritime Organisation. According to the measure, the weight of the containers that are loaded on the ship will have to be disclosed and not just the weight of the goods inside the container. OCEMA has filed agreements with the Federal Maritime Commission to start talks with port authorities in Houston, Georgia, South Carolina and others in order to develop a standard for cargo terminals and ports to offer weighing services to exporters. OCEMA will require the commission's approval for agreement before the ports and ocean carriers can begin development of the plan. The rule will take effect from 1 July 2016. West Coast Ports and Port Authority of New York and New Jersey were not included in the deal.

Source: Wall Street Journal, 19 May

due to the 3.4% drop in container handling to 2.23 million twenty-foot equivalent units (TEUs). Container transport with China, which is the port's most important trade partner however decreased by 8%.

Source: Suddetsche Zeitung, 23 May

Timber Shipment through Ports in Peninsular Malaysia, May 2016



Germany: Port of Hamburg Records Drop in Cargo Handling in Q1 2016

The amount of handled cargo at the German Port of Hamburg fell by 2.5% to 34.8 million tonnes in the first quarter of 2016. The decline was primarily

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MAY 2016

Total export of Malaysian timber and timber products in May 2016 increased 0.2% in value to RM1.77 billion from the previous month. Cumulative export for January to May 2016 increased 4% to RM9.1 billion over the previous corresponding period.

SAWNTIMBER

Export of sawntimber in May 2016 decreased 9% in volume and 6% in value to 160,861 m³ with a value of RM271.5 million as compared to the previous month. Cumulative export for the first five months of 2016 decreased 9% in volume however increased 11% in value to 794,613 m³ totaling RM1.4 billion over the previous corresponding period.

Export of sawntimber to the EU for the month decreased 12% to 10,177 m³ from 11,543 m³ in the previous month resulting from declining demand from major market in the region. Export to the Netherlands and UK decreased 30% and 13% to 3,159 m³ and 2,144 m³ respectively. Similarly, purchases made by Belgium declined 19% to 931 m³ followed by Germany at 7% to 1,044 m³ respectively. However, export to France increased 2% to 1,623 m³ from 1,590 m³ in the previous month.

Total exports to West Asia increased 10% to 27,225 m³ from 24,815 m³ recorded in the previous month. This is due to improved demand from the UAE by 38% to 7,208 m³, followed by Oman at 19% to 5,064 m³, Saudi Arabia at 20% to 2,570 m³ and Qatar at 86% to 1,795 m³. On the other hand, export to Yemen and Kuwait declined 10% and 64% to 7,867 m³ and 339 m³ respectively.

Buying from ASEAN decreased 21% to 57,778 m³ from 72,815 m³ registered in the previous month. Export of sawntimber to Thailand, major buyer of sawntimber from Malaysia declined 6% to 31,725 m³ from 33,821 m³ in the previous month. Likewise, export to the Philippines and Singapore decreased 43% to 15,868 m³ and 4% to 8,923 m³ respectively.

Shipments to East Asia reduced marginally to 36,443 m³ from 37,117 m³ in the previous month. Export of sawntimber to Taiwan and Japan decreased 17% and 41% to 7,507 m³ and 3,821 m³ respectively. In the meanwhile, export of sawntimber to China and South Korea increased 15% to 20,574 m³ and 20% to 4,204 m³ respectively.

Elsewhere, exports to the US increased 12% to 1,649 m³ whilst intake by Australia reduced 21% to 823 m³. Demand from South Africa decreased 7% to 5,220 m³ from 5,608 m³ in the previous month.

The average FOB price of sawntimber increased 3% to RM1,688 per m³ from RM1,634 per m³ in the previous month. Price of Dark Red Meranti (DRM) increased 8% to RM1,888 per m³ from RM2,042 per m³ in the previous month. Price of DRM to the Netherlands improved 3% to RM3,537 per m³ from RM3,439 per m³ in the previous month. Keruing was traded at RM1,648 per m³, a decrease of 5% from RM1,739 per m³ in the previous month.

PLYWOOD

Total export of plywood in May decreased 8% in volume but increased 3% in value to 456,229 m³ valued at RM373.8 million as compared to the previous month.

Total exports to the EU increased by 21% to 13,258 m³. Likewise, shipments to Ireland, the Netherlands and UK increased by 43%, 6% and 32% to 718 m³, 1,230 m³ and 10,562 m³ respectively. However, Belgium reduced its intake by 12% to 610 m³, whilst Denmark, France, Germany and Italy did not make any purchases.

Exports to ASEAN region increased as Brunei, Indonesia, Singapore, and Thailand intake of plywood increased by 70%, 90%, 35% and 3% to 1,250 m³, 114 m³, 3,831 m³ and 4,986 m³ respectively. On the other hand, Philippines reduced its intake by 20% to 3,831 m³. In East Asia, exports to China, Japan and Taiwan increased their intake by 26%, 6% and 7% to 2,772 m³, 98,839 m³ and 13,314 m³ respectively. However, Hong Kong and South Korea reduced their intake by 1% and 19% to 2,939 m³ and 24,020 m³ respectively.

Overall, exports to West Asia increased by 109% as compared to the previous month. Similarly, shipments to Saudi Arabia, Qatar and Yemen increased by 187%, 66% and 186% to 4,867 m³, 439 m³ and 24,464 m³ respectively. However, Bahrain, the UAE and Kuwait reduced their intake by 30%, 3% and 35% to 412 m³, 4,981 m³ and 297 m³ respectively.

Elsewhere, exports of plywood to South Africa, Mauritius, the US, Mexico, New Zealand and Turkey decreased by 75%, 94%, 10%, 31%, 30% and 32% to 190 m³, 3 m³, 231,265 m³, 5,195 m³, 141 m³ and 226 m³ respectively whilst Algeria and Norway did not make any purchases. However, Canada improved purchases significantly to 2,717 m³ from only 84 m³ in the previous month. Similarly, Australia and the UK increased their intake by 8% and 32% to 4,335 m³ and 10,562 m³ respectively.

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MAY 2016

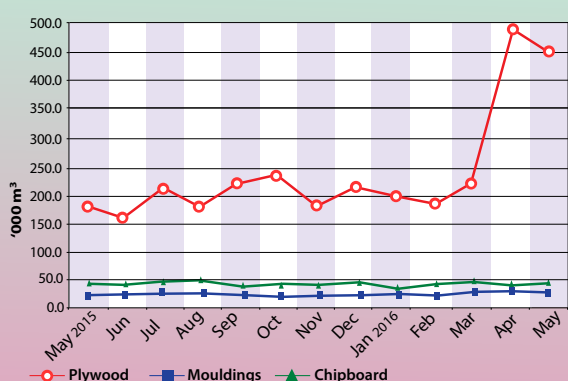
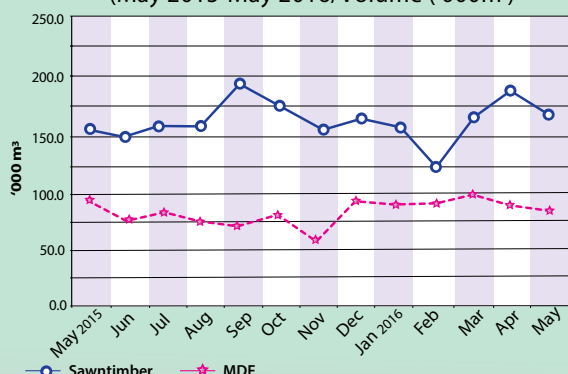
The FOB price of plywood increased by 12% to RM819 per m³ from RM731 per m³ in the previous month.

VENEER

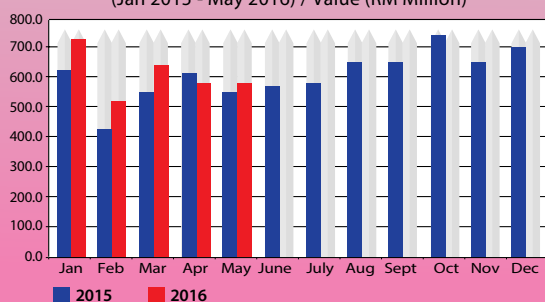
Exports of veneer for May 2016 showed a decrease of 14% in volume and 13% in value to 20,032 m³ at RM30.1 million as compared to the previous month. Exports to China, Taiwan, India, Viet Nam, Australia and Italy decreased by 22%, 30%, 72%, 71%, 41% and 30% to 876 m³, 8,283 m³, 88 m³, 42 m³, 144 m³ and 62 m³ respectively. On the other hand, South Korea, Singapore and Philippines increased their intake by 8%, 19% and 17% to 8,793 m³, 62 m³ and 231 m³ respectively, whilst, Canada maintained its intake at 12 m³ whilst Chile resumed its purchases.

The FOB price of veneer increased to RM1,504 per m³ from RM1,479 per m³, an increase of 2% from the previous month.

Malaysia : Export of Major Timber Products
(May 2015-May 2016/Volume ('000m³)



Malaysia : Export of Wooden Furniture
(Jan 2015 - May 2016) / Value (RM Million)



Source : Department of Statistics, Malaysia

MEDIUM DENSITY FIBREBOARD (MDF)

Peninsular Malaysia's exports of MDF for May 2016 showed a decrease of 3% in volume and 4% in value from the previous month. Export totalled 85,869 m³ at RM92.9 million.

Exports to East Asia registered a decrease of 17% to 12,730 m³ from 15,357 m³. Export to South Korea registered positive growth by 61% to 809 m³. However, export to China including Hong Kong decreased by 2% to 250 m³, followed by Taiwan by 11% to 889 m³ and Japan by 21% to 10,782 m³.

However, exports to West Asia market recorded positive growth with an increase of 1% in volume to 39,175 m³ from 38,660 m³ in the previous month. Export to Syria recorded an increase of 158% to 8,386 m³ followed by Bahrain at 126% to 766 m³, Iran increased by 100% to 4,264 m³ and Saudi Arabia increased by 17% to 6,627 m³. On the other hand, export to Qatar, Lebanon, the UAE, Jordan, Oman and Kuwait decreased by 7% to 1,837 m³, 16% to 453 m³, 17% to 13,565 m³, 26% to 360 m³, 44% to 2,074 m³ and 86% to 843 m³ respectively.

Furthermore, export to South Asia also recorded negative growth by 20%. Only export to Bangladesh increased by 249% to 1,946 m³. Export to Pakistan, India and Sri Lanka decreased by 23% to 6,116 m³, 29% to 3,625 m³ and 67% to 580 m³ respectively.

Export to the US, Australia, the UK, Mauritius and South Africa showed negative growth by 2% to 1,794 m³, 27% to 2,050 m³, 51% to 257 m³, 73% to 70 m³ and 78% to 128 m³ respectively.

In ASEAN, total export to ASEAN region for this month increased by 51% to 15,377 m³ from 10,184 m³ in the previous month. Export to Viet Nam, the Philippines and Indonesia increased by 41% to 9,761 m³, 57% to 1,975 m³ and 96% to 2,775 m³ respectively. Nevertheless export to Singapore registered negative growth by 1% to 447 m³.

MOULDINGS

Exports of mouldings for the month decreased both by 10% and 5% in volume and value to 19,880 m³ and RM70.2 million respectively. Cumulative exports for the period of January to May 2016 decreased by 13% in volume however increased by 5% in value to 99,615 m³ and RM352.2 million respectively as compared to the previous corresponding period.

MAY 2016



LOGS

The supplies of logs were reported to be sufficiently available and accessible. The average domestic prices of logs for most of the species for the month under review remained at last month's level.

Logs price for the species of Chengal and Balau stood firm at RM4,000 per tonne and RM3,000 per tonne respectively. Meanwhile, price of Kempas logs rose significantly by 3.1% to RM1,650 per tonne over last month's level. Keruing and Kapur logs prices however remained at RM1,400 per tonne and RM1,700 per tonne respectively. However, prices for Red Meranti and Mersawa logs declined by 10.3% and 11.8% to RM1,750 per tonne and RM1,500 per tonne from previous month. On the other hand, prices for Mixed Heavy Hardwood charted an increase of 0.4% to RM944 per tonne whilst Mixed Light Hardwood remained at RM1,200 per tonne.

SAWNTIMBER

The average sawntimber prices for most of the species in the domestic market continued to firm whilst some of the species experiencing some price reduction.

Prices of Chengal, Balau and Merbau sawntimber remained at RM6,638 per m³, RM3,178 per m³ and RM 3,849 per m³ respectively. Similarly, prices of Keruing and Kapur maintained at RM1,766 per m³ and RM2,248 per m³ respectively. However Red Meranti sawntimber declined by 2.9% to RM1,907 over previous month. Prices of Dark Red Meranti

and Nyatoh were traded at RM2,013 per m³ and RM918 per m³ respectively. Sawntimber prices of Mixed Heavy Hardwood dropped by 7.5% to RM865 per m³ whilst Mixed Light Hardwood continued to be traded at RM1,130 per m³.

PLYWOOD

The supply of plywood for the usage of the domestic market continued to suffice the need of local demand. Plywood traders reported that there were no significant changes in the export price. Meanwhile, plywood prices of 4mm, 6mm, 9mm and 12mm of thicknesses were continuously traded domestically at RM14.60, RM22.00, RM34.50 and RM41.50 per piece respectively.

MEDIUM DENSITY FIBREBOARD (MDF)

Demand for MDF reported to remain low although there were signs of positive demand from the key end-users such as construction and furniture industries reported in the overseas' market. With the average demand received from the domestic market, prices were reported to hover at last month's level. MDF of 4mm, 6mm, 9mm and 12mm of thicknesses were traded at RM12.10, RM15.80, RM21.70 and RM28.10 per piece respectively.

INTRA-MALAYSIA TRADE * - MAY 2016

The intra-Malaysia trade for the month under review continued to fluctuate. Meanwhile, demand from abroad market were also reported to be unfavorable, thus pushing the industry players to focus more on the local demand.

INTRA-MALAYSIA TRADE – MAY 2016

From	Products	APRIL 2016		MAY 2016		% Change in Volume May 2016 / Apr 2016	% Change in Value May 2016 / Apr 2016
		Volume (m ³)	Value (RM '000)	Volume (m ³)	Value (RM '000)		
SABAH	Logs	0	0	0	0	0	0
	Sawntimber	443	1,032	61	172	-86	-83
	Plywood	10,859	20,052	9,743	17,459	-10	-13
	Veneer	4	70	152	243	3,700	247
SARAWAK	Logs	0	0	0	0	0	0
	Sawntimber	241	128	530	693	120	441
	Plywood	7,262	9,393	8,765	11,419	21	22
	Veneer	7,292	10,042	3,984	5,606	-45	-44

Source : Department of Statistics, Malaysia

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MAY 2016

The shipments of sawntimber from Sabah to Peninsular Malaysia decreased sharply by 86% to 61 m³, valued at RM172,000. Similarly, shipments of plywood fell by 10% in volume from 10,859 m³ to 9,743 m³ valued at RM17 million. Meanwhile, shipment of veneer increased tremendously in volume from 4 m³ last month to 152 m³, worth at RM243,000.

530 m³, worth at RM693,000. Meanwhile, export of plywood grew by 21% to 8,765 m³ valued at RM11.4 million. Conversely, export of veneer fell by 45% to 3,984 m³ worth at RM5.6 million.

No intra trade from Peninsular Malaysia to Sabah and Sarawak was recorded in May 2016.

* Source : Department of Statistics, Malaysia

Export of sawntimber from Sarawak to Peninsular Malaysia increased by triple digits in volume to

***AVERAGE DOMESTIC PRICES OF LOGS, SAWNTIMBER, PLYWOOD AND MDF IN PENINSULAR MALAYSIA
MAY 2016 (VALUE IN RM)**

SPECIES	LOGS/tonne	SAWNTIMBER/m ³			
	18" UP	GMS	STRIPS	SCANTLINGS	
HEAVY HARDWOOD					
Chengal	4,000	6,638	7,062	8,828	
Balau	3,000	3,178	3,249	3,531	
Red Balau	2,500	2,966	3,037	3,178	
Merbau	2,700	3,849	3,884	3,347	
Mixed Heavy Hardwood	944	865	918	989	
MEDIUM HARDWOOD					
Keruing	1,400	1,766	1,836	2,203	
Kempas	1,650	2,065	2,083	2,154	
Kapur	1,700	2,248	2,260	2,331	
Mengkulang	1,100	1,412	1,448	1,575	
Tualang	1,400	2,472	2,542	2,585	
LIGHT HARDWOOD					
Dark Red Meranti	1,900	2,013	2,119	2,707	
Red Meranti	1,750	1,907	2,013	2,048	
Yellow Meranti	1,200	1,342	1,349	1,554	
White Meranti	1,070	2,119	2,189	2,260	
Mersawa	1,500	1,554	1,660	1,624	
Nyato	900	918	1,201	1,236	
Sepetir	1,100	1,282	1,448	1,469	
Jelutong	1,100	1,638	1,624	1,730	
Mixed Light Hardwood	1,200	1,130	1,871	1,236	
MALAYSIAN RUBBERWOOD <i>Hevea brasiliensis</i>	LOGS/tonne	SAWNTIMBER/m ³			
		1" X 1"	2" X 2"	3" X 3"	4" X 4"
	150	900	1,000	1,050	1,100
PLYWOOD 4' X 8' (RM per piece)	4mm	6mm	9mm	12mm	
	14.60	22.00	34.50	41.50	
MDF 4' X 8' (RM per piece)	4mm	6mm	9mm	12mm	
	12.10	15.80	21.70	28.10	

Note: Log prices ex-batau. Sawntimber, plywood, MDF and Malaysian Rubberwood (*Hevea brasiliensis*) prices ex-mill

* Prices are only indicative





Lukisan Seribu Makna, Kayu Eratkan Semua
A Picture Paints a Thousand Words. Wood Binds Them All

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Exports to the EU for the month recorded at 6,916 m³, a decrease of 15% compared to the previous month. Belgium, Germany, the Netherlands and UK decreased their purchases by 11%, 31%, 19% and 7% to 781 m³, 1,122 m³, 3,319 m³ and 605 m³ respectively.

Exports to ASEAN region increased as Singapore intake of mouldings increased by 22% to 1,417 m³ whilst exports to Viet Nam decreased 43% to 147 m³ from 258 m³ compared to the previous month. However, Indonesia resumed its intake for the month.

Meanwhile, exports to Taiwan, Japan and South Korea decreased by 75%, 29% and 21% to 21 m³, 2,105 m³ and 1,401 m³ respectively. Exports to Hong Kong and China also decreased by 46% and 40% to 144 m³ and 168 m³ compared to the previous month.

Elsewhere, export to the Australia, Canada and the US increased by 29%, 26% and 10% to 2,801 m³, 116 m³ and 2,792 m³ respectively compared to the previous month.

FOB unit value registered at RM3,531 per m³, an increase of 6% compared to the previous month.

BUILDERS JOINERY AND CARPENTRY (BJC)

Total BJC cumulative exports from May 2016 increased 19% to RM479.0 million as compared to RM403.7 million in the corresponding period last year. Export to the EU increased 14% to RM130.7 million. Export to Germany, Turkey, Italy, Denmark and UK increased by 256%, 229%, 63%, 47% and 14% to RM11.3 million, RM2.4 million, RM1.8 million, RM9.3 million and RM74.8 million respectively. However, export to Sweden, Belgium and France decreased by 39%, 23% and 19% to RM2.7 million, RM16.7 million and RM7.4 million compared to the previous year. Meanwhile, the Netherlands resumed its intakes.

In Asia, exports to Saudi Arabia, Viet Nam and Taiwan decreased 17%, 14% and 13% valued at RM2.0 million, RM12.4 million and RM6.6 million respectively compared to the previous year. However, exports to the UAE, Qatar, Pakistan, South Korea, Thailand, Singapore, Japan, and India grew 106%, 100%, 40%, 28%, 24%, 22%, 8% and 3% to RM2.2 million, RM901 thousand, RM24.4 million, RM1.2 million, RM117.2 million, RM55.9 million, RM29.9 million and RM25.6 million respectively. Meanwhile, Bahrain did not make any purchases.

Exports to Australia and Mauritius increased by 39% and 28% to RM83.3 million and RM184 thousand compared to the previous year. However, South Africa decreased its purchases by 8% to RM7.0 million. Likewise, the US increased its intake by 15% to RM38.5 million from RM33.5 million in the previous corresponding period.

FURNITURE

Malaysia's exports of wooden and rattan furniture for the period under review in 2016 picked up momentum by 9.8% compared to the corresponding period of 2015. Total shipments recorded RM3.04 billion against RM2.77 billion in 2015. Purchase of wooden furniture from Malaysia for the January to May duration increased by 9.6% from RM 2.75 billion to RM 3.02 billion compared to the same period in 2015.

Demand for wooden furniture for the month was positive across most major markets. Demand from the US remained firm as exports rose 15% from RM933.8 million to RM1.1 billion. Consumption by Japan also picked up 28% from RM192.8 million to RM246.9 million whilst intake by Australia increased 17% from RM217.7 million to RM254.8 million in 2016. Similarly, demand from Singapore and the UK recorded an increase by 29% to RM191.3 million and 23% to RM185.5 million respectively. However, Canada decreased its intake of wooden furniture by 10% to reach RM101.4 million in 2016.

Demand from the UAE and Saudi Arabia recorded a decline of 12% to RM87.8 million and 21% to RM68.6 million respectively. On the other hand, imports by India increased 31% to reach RM59.4 million. Likewise, the Philippines also increased imports by 54% from RM35.0 million in 2015 to RM53.8 million. Similarly, demand from South Korea recorded a slight increase of 2% to RM51.9 million.

Meanwhile, exports of rattan furniture increased by 62% to RM22.1 million in 2016 from RM13.7 million in 2015. France is the top importer with an intake of RM5.8 million, a significant increase from RM345 thousand in the previous month. Demand from Singapore also increased by 60% to RM3.3 million from RM2.1 million in 2015. Similarly, imports by Australia grew at 129% to RM2.2 million. Imports by the UK increased 40% to RM2.5 million. However, demand from the US weakened by 45% to RM0.48 million.

Shipments to China, increased by 131% to RM0.57 million. On the other hand, India and Thailand reduced their consumption by 72% to RM0.73 million and 69% to RM0.18 million respectively.

WMF 2016

The 16th International Exhibition on Woodworking Machinery and Furniture Manufacturing Equipment and The International Exhibition on Woodworking Machinery Supplies and Accessories (WMF 2016) were held on 1-4 June in Beijing, China. WMF 2016 was an international exhibition on woodworking machinery and furniture manufacturing equipment and is one of the largest and the most established woodworking exhibitions in China. The fair showcased the latest intelligent and green woodworking machines, and technologies and solutions to assist woodworking and furniture enterprises in achieving an environmental-friendly and sustainable production at a reduced cost. The showcase features comprised six zones: 'Automation and CNC Machinery Zone', 'Furniture Making and Wooden Products Machinery', 'Machinery for Green Production and Energy Saving/Machinery for the First Time Processing, Drying, Coating and Material Making', 'Panel Board Machinery', 'Knives, Blades and Machinery Accessories/ Hand Tools' and 'Engraving Machinery'.

World-class machinery producers namely Homag, Homag China, Linze, Yuton, Weinig, and Unisunx presented their latest software and equipment which were designed in line with the theme smart manufacturing. One of more attractive programmes included a demonstration on 'Woodshop software' by Homag China and it involved a 3D simulation and an automatic calculation of the cost in designing and producing a wardrobe. Another demonstration showed a complete wardrobe-production cycle – from design, order placement, production to packaging software such as WCC, CutRite and I-Share. Besides that, Biesse, an international machinery producer also presented their latest

CNC machine model, Rover Gold, which has a flexible design and is highly applicable to different production lines. The company also exhibited a sanding machine that is tailored for solid wood furniture.

On the first day of the fair, two papers were presented:

- Global Industry Towards Smart Manufacturing- "4.0 Smart Factory" presented by Mr. Raymond Shan (Principal Consultant from Smart Manufacturing and Materials Division of Hong Kong Productivity Council).
- Manufacturing Model of Chinese Furniture Industry 4.0 by Prof Wu Zhihui (Dean of College of Furniture and Industrial Design of Nanjing Forestry University).

Both papers discussed global trends in the woodworking industry in which China has promulgated strategic plans focusing on intelligent production from a macro perspective of global trends in the woodworking industry and analysed how China could cement her place among the world's leading manufacturing players.

On the second day, three technical papers were presented: "Energy Saving Panel Board Production Technology" by Research Institute of Wood Industry, Chinese Academy of Forestry; "Green Furniture Labeling: Problem, Research and Suggestions" by Prof. Zhang Yin Ping from Tsing Hua University; "The Design Drive Innovation in Contemporary Furniture B2B Markets" by Mr. Flaviano Celaschi, University di Bologna, Italy.



Exhibition Hall.



Broadboard manufacturing machine.

SHORT TRAINING COURSE ON GLULAM



One for the album - Lecturers and participants of Glulam Course at University of Melbourne, Australia.

MTIB is currently focusing on broadening the scope of certification to glulam products. To increase knowledge about glulam quality control among MTIB personnel, MTIB participated in MTC's Training Course on Glulam from 2 to 5 May. The course was organised by Malaysian Timber Council (MTC) in cooperation with the University of Melbourne, Australia. The course includes three days of training and one day visiting a glulam factory and a pest management company.

The course was conducted by Dr. Constantine Adam and Dr. Berham Ahmed from the University of Melbourne, Australia. The programme focused on the key areas of glulam manufacturing, quality control, timber pest management and durability, with specific reference to Malaysian timbers and standards. It aimed at enhancing knowledge on the manufacturing processes of glulam, especially on improving product quality control. MTIB will thus be able to plan and implement more comprehensive activities towards the implementation of the certification system of glulam products. This is to ensure that the products manufactured by the industry is of good quality and is safe for use according to relevant standard requirements. The industry will consequently be able to improve their access in both domestic and international markets.

To see the actual process involved in the manufacturing of glulam products, participants were brought to visit a glulam factory - Vic Beam Laminated Timber Specialist. Participants were briefed about the company and products including its quality assurance scheme. At the factory, participants observed the glulam manufacturing process, from the supply of raw material until the product completion stage.

Participants were also brought to visit buildings that have timber structures which use Cross Laminated Timber. They were taken to the Melbourne School of Design, Library at The Dock and the Forte residential buildings. They also went to the Specialist Termite Control Company to get information of pest management for timber structures, especially focusing on termites and fungi.

There were 22 participants in the programme. The participants comprised representatives of government organisations and the private sector: Ministry of Urban Wellbeing, Housing and Local Government, MTC, Fire Rescue Department of Malaysia, Putrajaya Corporation, Forest Research Institute Malaysia, MTIB, Universiti Teknologi MARA, Exowood (M) Sdn. Bhd., Ikhtisas Ingeniours Sdn. Bhd., Kemudi Korporat Sdn. Bhd., Konsortium Peka Sdn. Bhd., MyGlam Sdn. Bhd., Wan Arjuna Architect, Ahmad Asmadi Architecture and Woodsfield Glulam Manufacturing Sdn. Bhd.

The participants were awarded a certificate from the University of Melbourne at the end of the course. MTIB was represented by Puan Nor Liza Mat Yasok from the Director-General's Office. 



Participants and Dr. Behram Ahmad, second from left posing with a unique structure in Melbourne School of Design (MSD).

EMPOWERING KNOWLEDGE WORKERS FOR A SUSTAINABLE FUTURE

Knowledge is a precious commodity, one that can be passed down and shared from one generation to the next. However, when the same philosophy is being practised in a work environment, how can one be sure that the environment is conducive enough for knowledge sharing to be properly and effectively implemented? Without us knowing it, precious knowledge may slip through the cracks and become lost forever. Realising this, JKR Malaysia and Knowledge Connections Sdn. Bhd. (KCSB) organised a Knowledge Management seminar entitled KCONNECT 2016 at Bank Negara Malaysia on 17 May. The seminar specifically focused on the Communities of Practice (CoP) which is a one-stop centre to manage and access all forms of content produced by a community. The half-day seminar was attended by more than 50 participants from various government agencies and academicians.

The objective of the seminar was to share experiences on the execution of knowledge management, which included the development of CoP. Officiating the seminar on behalf of the Director-General of Public Works Department of Malaysia was Dato' Ir. Dr. Hasnul Mohamed Salleh, who is the Deputy Director-General of Public Works Department of Malaysia. In his speech, he highlighted the importance of a proper knowledge management system which would assist all employees to work smarter and be more productive. The system should encourage better communication, networking and collaboration which inevitably would lead to good decisions being made by any organisation, as all information is updated efficiently.



Opening speech by Dato' Ir. Dr. Hasnul Mohamed Salleh, Deputy Director-General of Public Works Department.



"Fishbowl" Panel session.

This was followed by a paper presentation entitled, "Cultivating Communities of Practice in the Academia" by Prof. Dr. Mohamed Ridza Wahiddin, who is the Deputy Rector of Research and Innovation from International Islamic University Malaysia (IIUM). He made a note that in our current society, we rarely effectively communicate with each other on a daily basis. Our communications lack meaning and substance which have resulted in conversations that do not have any real impact.

The next presenter, Dr. SV Lingam who was from Paradigm Sdn. Bhd, presented a paper entitled "An Overview of Factors Influencing Knowledge Sharing in Organisations". He explained that there are the factors that influence knowledge sharing. They include leadership, knowledge network, organisational culture, information technology, resources, and structure and human resource practices. He also warned that knowledge sharing programmes will not be adopted easily by the community and that it would take time for them to truly appreciate the full effectiveness of the programmes.

The paper presentations were followed by a fishbowl session, which featured the following panelists: Sr Roznita Othman from JKR, Col. Zulkefli Abdullah from the National Defence University of Malaysia, Encik Ahmad Khairuddin A. Rahim from the Malaysia Investment Development Authority and Mrs. Geeta Albert from KCSB. It was an insightful session as numerous members of the audience presented pertinent questions with regard to the implementation of a proper knowledge system in a workplace.

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Later, the audience was invited to participate in a Knowledge Café session where they were divided into several groups and had the opportunity to ask, learn and share from each other on two pre-selected issues.

Dato' Dr. Zaiton Osman, who was the Principal Consultant for KCSB, gave the closing speech for the seminar. She hoped that all participants had learnt relevant information from the seminar and would begin the groundwork to be implemented in their work environments.

MTIB was represented by Encik Shamsul Azman Abdul Aziz from Strategic Planning and Corporate Affairs. 



Knowledge Café session.

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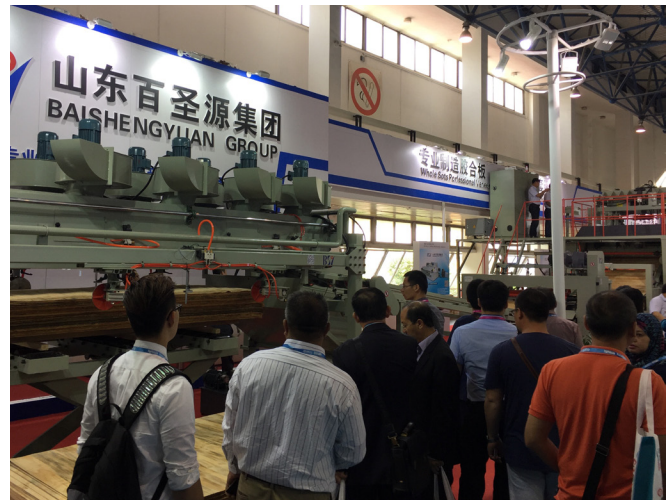
Timber News

The talks expounded on the transformation of the panel board industry and the guidelines to achieve long-term sustainable development. An equipment-manufacturing expert also shared latest new technologies in particleboard production and new design concepts. The expansion of green panel production and new raw materials sources were also discussed.



On-line log peeling machine.

Participants gained a better understanding on the status of the market and the momentum and focus of development. MTIB was represented by Dr. Yeoh Beng Hoong. A representative from Alaf Hijau Sdn. Bhd. also attended the WMF Fair 2016 under the MTIB banner. 



Veneer peeling machine up to 10 mm thickness.



Malaysian Wood
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15th MEETING OF THE WORKING GROUP ON A PAN ASEAN TIMBER CERTIFICATION INITIATIVE



Group photo with all delegates at the 15th Meeting of the Working Group on a Pan ASEAN Timber Certification Initiative.

The 15th meeting of the Working Group on a Pan ASEAN Timber Certification Initiative (PATCI) was held on 2 – 3 June in Lampang Province, Thailand. The meeting was attended by delegates from Cambodia, Lao PDR, Malaysia, Myanmar, Philippines and Thailand. Also present were representatives from the ASEAN Secretariat, the Responsible Asia Forestry and Trade – The Nature Conservancy (RAFT-TNC), EU-FLEGT Facility, and FAO. Malaysia was represented by MTCC (Head of Delegation), MPIC, MTIB, Malaysian Timber Council, Sarawak Timber Industry Development Corporation and Sarawak Timber Association.

Delegates were welcomed by Mr. Sapol Boonsermsuk, Director of International Forestry Cooperation Office, on behalf of the Director General of Royal Thai Forest Department. He stated that the 15th Meeting would discuss, among other things, the finalisation of the stock-taking study on existing initiatives for ensuring legal and sustainable timber, the current ASEAN policies development and the FLEG Work Plan (2016-2025).

On behalf of Malaysia as the lead country for this initiative, Cik Siti Syaliza Mustapha, Senior Manager (Forest Management) of Malaysian Timber Certification Council delivered the opening remarks. She underlined the achievements of the

working group since its establishment in 2002, which included the ASEAN Guidelines on Phased Approach to Forest Certification, the ASEAN Criteria and Indicators for Legality of Timber, and the ASEAN Guidelines on Chain of Custody for Legal Timber and Sustainable Timber. Capacity building activities on forest certification that had been conducted at regional and national levels were also mentioned. Malaysia appreciated all AMS for the support given during her leadership for this working group.

The agenda continued with Thailand and Viet Nam being elected as Chairman and Vice Chairman of the Meeting. Subsequently, the agenda was adopted and this was followed by a plenary session which opened with a discussion on the Progress in the Implementation of Policy Framework Related to ASEAN Cooperation in Forestry. The Meeting was informed by ASEAN Secretariat on the outcome of the 18th Meeting of the ASEAN Senior Officials on Forestry (ASOF), and related meetings on issues relevant to Forestry Sectors. These included the agreed Strategic Thrusts for ASEAN Cooperation in Forestry, Proposed Streamlining of subsidiary bodies under ASOF and the progress on the study on Existing Initiatives for Ensuring Legal and Sustainable Timber in ASEAN.

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On the issue of the Roadmap for an ASEAN Community, the ASEAN Leaders during the 27th ASEAN Summits had reaffirmed their commitment to continue the process to further strengthen economic integration. This was for the next 10-year plan, under the ASEAN Economic Community Blueprint 2025 which covers the five characteristics of the AEC 2025 which among others is 'a highly Integrated and cohesive economy and a competitive, innovative, and dynamic ASEAN'.

Next, each country reported the progress of its forest management system and gave updates of the system. Lao PDR stated that its Government has imposed a logging ban on all Production Forest Areas (PFAs) since 2012 and logging operation will be considered in 2017, while Malaysia has 366 companies holding the PEFC CoC certificate as of 1 May 2016. The Meeting noted that the MTCS met and exceed the ASEAN C&I and moreover it was developed taking into account the international requirements on forest certification. The Philippines also updated their Philippines Forest Certification System (PFCS) and its guidelines on the National Certification System had been finalised. An independent body has been established to implement the forest certification system and for the accreditation of certifiers/certification bodies, will be undertake by an Accreditation Body.

Meanwhile, the Stock Taking Study on Existing Initiatives for Ensuring Legal and Sustainable Timber in ASEAN was in the final draft and will be submitted at the 19th ASOF Meeting. The Meeting

was also informed on the development of the Work Plan for FLEG in ASEAN. The Work Plan was developed based on the proposed Strategic Plan of Action (SPA) for ASEAN Cooperation in Forestry (2016-2025) and the current Work Plan for FLEG in ASEAN (2008-2015). The overall goal and objective of FLEG implementation is the attainment of sustainable forest management for enhancing the international competitiveness of ASEAN's forestry products that meet international requirements and which is consistent with sustainable forest management practices, including conservation and protection. Discussions and input will be added to the Work Plan for further consideration at the 12th ASEAN Expert Group on the International Forest Policy Processes (AEG-IFPP) Meeting that will be held on 8-10 June 2016 in Siem Reap, Cambodia.

Another important agenda was the Streamlining of the Working Groups under ASOF. This was due to the need to enhance effectiveness and efficiency of subsidiary bodies under ASOF. The 18th ASOF agreed to subsume the AWG PATCI and AEG Herbal and Medicinal Plants into ASEAN Expert Group-Forest Product Development (AEG-FPD). The 18th ASOF Meeting requested the ASEAN Secretariat to continue acting as consultant to define and draft new Terms of Reference (ToR) and Rules of Procedures (RoP) of the agreed subsidiary bodies as proposed. On the RoP draft, the Meeting agreed to have two focal points for the working group representing R&D focal points and the relevant department responsible for forest certification issues.

With matters pertaining to the FLEGT VPA, the exchange of Information and Experiences on



Chairman of Meeting, Mr. Sapol Boonsermsuk, Director of International Forestry Cooperation Office, on behalf of Director-General of Royal Thai Forest Department delivering his speech.

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Malaysian delegation poses for the camera.

Country Preparation for Negotiation with the EU on a Voluntary Partnership Agreement (VPA) was discussed. Representatives from Cambodia presented a joint study on Timber Flow and Control in Cambodia in the context of FLEGT while Lao PDR spoke about two Ministerial and three pilot provinces involved in the implementation of VPA.

Puan Emie Syarina Norizan from MTIB presented Malaysia's current status of negotiation, outstanding issues, moving forward and the implementation of TLAS as MYTLAS in Peninsular Malaysia. Until December 2015, 33,000 MYTLAS licences had been issued since its implementation in February 2013. The meeting also noted the challenges in the VPA process which includes consultation with states across the country, understanding the VPA platform in particular with the NGO and the level of requirements needed by the EU.

Following that, Thailand presented the process of Thai-EU FLEGT VPA, Scope of VPA, the Roadmap and lessons learnt. Thailand had already conducted serial consultation workshops with stakeholders and developed the legality definition.

Other supporting partners also presented their support for programmes related to forestry in ASEAN. The Responsible Asia Forestry and Trade (RAFT-TNC) presented the thematic scope of RAFT for 2015-2018 that included sustainable forest and plantation management, and transparent and legal trade.

The EU FLEGT Facility Policy Analyst, Puan Aimi Abdullah proposed on "Potential Collaboration and Support to ASEAN Cooperation in Forestry". Among the activities presented in supporting the FLEG Workplan (2016-2025) were areas of facilitation of legal and sustainable forest products, enhancement of ASEAN joint approaches in addressing FLEG issues, promotion and implementation of training programmes on FLEG and small and medium sized enterprises. The Meeting noted that the EU-FLEGT facility was willing to support sub-regional training on timber legality assurance for ASEAN in AMS. The concept note of the fifth sub-regional training workshop which will be conducted in November or December this year was also presented to the Meeting.

Mr. Brunno Cammaert of FAO-FLEGT Programme Asia Pacific, also in their inaugural participation in the PATCI meeting, presented the Concept Note for FAO Regional Support on "Improved Compatibility and Synergies between Forestry Standards and Conformance Infrastructure in the ASEAN Region". The concept note outlined possible activities in support of increased synergies and compatibility between standards and conformity infrastructure development used under FLEGT VPAs and voluntary certification schemes.

Subject to the decision at the 19th ASOF Meeting on the Streamlining of the Working Groups under ASOF, the Meeting of the Working Group on Pan ASEAN Timber Certification Initiative has tentatively been scheduled to be held in 2017 in Viet Nam.

A.N INTERIOR DESIGN SDN. BHD. – FORGING POSITION AS BUMIPUTERA FURNITURE MANUFACTURER LEADER

Background

A.N Interior Design Sdn. Bhd. is one of more successful Bumiputera furniture companies in Sabah. The company has been in operation for 20 years; since 1996. Encik Amil Hussin Bin Dandi, Managing Director of A.N Interior Design Sdn. Bhd. said their hard work and continuous efforts paid off and made the company what it is today. His venture into the furniture manufacturing business started in 1992 with support from Majlis Amanah Rakyat (MARA) and Bank Pembangunan Malaysia (SME Bank). Today, A.N Interior Design Sdn. Bhd. is a major supplier of school furniture in Sabah. In addition the company also receives orders for customised furniture designs, built-in furniture, construction work and maintenance.

Company Vision

Being the only Bumiputera furniture manufacturing company operating in Sandakan, A.N Interior Design Sdn. Bhd. aims to be a leader in the production of wood-based products and manufacturers. Their experience and perseverance act as support towards achieving the vision.

Core Business

A.N Interior Design Sdn. Bhd. is a pioneer supplier of school furniture in Sabah. The company still is a major supplier of school furniture to the schools on the East Coast of Sabah. They maintain a consistent supply by a consistent production with well-equipped machines and sufficient labour force. The



Encik Amil Hussin Bin Dandi, Managing Director of A.N Interior Design Sdn. Bhd.

company has more than 40 types of machines and tools, and 50 workers.

Other products are office furniture, kitchen cabinets and interior design including the construction work and maintenance.



WISDEC's Vocational College (WVC) students at A.N Interior Design Sdn. Bhd.

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Market and Future

Among the clients of A.N Interior Design Sdn. Bhd. are the Sabah Education Department, state and federal government agencies, the private sector and individuals. The supply to the Sabah Education Department is based on contract.

A.N Interior Design Sdn. Bhd. is one of the beneficiaries under the Economic Stimulus Programme for assistance on machinery and raw materials. This company is very committed and gives strong support, through involvement and cooperation, to courses and other related programme organised by MTIB.

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Sabah

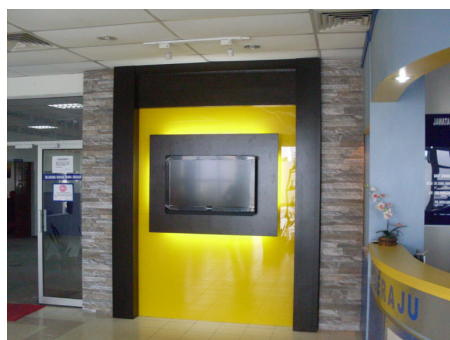
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WVC students on hands-on training at the factory.



Products manufactured by A.N. Interior Design Sdn. Bhd..

GERMANY – TIMBER INDUSTRY OUTLOOK



The Federal Republic of Germany is located in central Europe. This country is bordered by the Netherlands in northwest, Belgium, Luxembourg and France in the west and southwest, Denmark in the north, the Czech Republic and Poland in the east and Switzerland and Austria in the south and southeast. The country shares its coastline with the Baltic Sea in the north and the North Sea in the northwest. It has a 2,389-kilometer long coastline and spans over an area of 357,022 sqm.

Economy

Germany is the largest economy in the European Union (EU) and the fourth largest in the world after the US, China, and Japan. The German economy has its great innovativeness and a strong focus on exports due to its competitiveness and global networking.

Positive economic momentum has led to a favourable trend in the labour market. Germany has highest employment rates in the EU and is the country with the lowest youth unemployment percentage. Germany is one of the 12 countries which introduced the Euro in 2002. The financial market crisis in 2008 and the subsequent debt crisis affected the whole of the Eurozone, Germany included. To combat adverse impacts, the Federal Government employed a twin-track strategy, which involved not taking on any new debt and adopting measures to bolster innovativeness. Hence, for the first time since 1969, in 2014 and 2015 the government was able to present a balanced federal budget.

Forest Resources

Germany ranks among the densely wooded countries in Europe. Around 11 million hectares, corresponding to one third of the national territory, are covered with forests. German forests are composed of approximately 60% coniferous forests and 40% deciduous forests. About 73% of German forests consist of mixed stands. Spruce accounts for the largest share among the tree species (28%), followed by Pine (23%), Beech (15%) and Oak (10%). The tree species proportions vary and depend on



the specific natural features and site conditions as well as on different historic developments. The majority of German forest areas have been certified according to leading international systems such as PEFC or FSC.

Timber Industry

The forest and timber industries, including processing and paper as well as printing and publishing, comprise nearly 1.3 million jobs with an annual turnover of about Euro170 billion. Forest-based industries play a major role notably for regional economic and rural employment structures because they are mainly composed of small and medium sized enterprises and are mostly located in rural areas.

Over the past five decades forests in Germany have increased by more than one million hectares and timber stocks account for 336 m³ per hectare, with an annual timber increment totalling around 76 million m³. Timber growth is around 121.6 million m³ per year. Therefore, Germany occupies a leading place compared with other European countries.

Timber Production

According to FAO's latest forest statistics, Germany produced around 43 million m³ of logs in 2014, an increase of 3% from 2013. Apart from log production, in 2014 the country produced 22 million m³ of sawntimber, 7 million m³ of particleboard and 5 million m³ of fibreboard.

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Germany: Production of Timber and Timber Products, 2010 - 2014(Volume: m³)

Product/Year	2010	2011	2012	2013	2014
Fibreboard	4,575,036	4,747,533	5,062,869	5,119,259	5,212,556
Logs	45,387,837	45,358,223	4,286,260	42,052,181	43,242,535
Particleboard	7,633,813	6,940,056	6,781,000	6,806,000	6,808,000
Sawntimber	22,059,099	22,628,100	21,081,299	21,478,169	21,782,793
Plywood	232,327	217,568	177,724	134,590	147,900
Veneer	183,378	186,730	126,715	103,575	97,695

Source: FAO

Germany's Import of Timber and Timber Products

Germany's import of timber and timber products in 2015 decreased 14.3% to USD12.4 million over the previous corresponding period. Germany imports

mainly furniture, sawntimber, BJC and plywood. Import of furniture and sawntimber totalled USD5.3 million and USD1.2 million, a decrease of 12% and 17% respectively. Similarly, imports of BJC and plywood declined by 19% to USD0.97 million and 14% to USD0.78 million respectively.

Germany: Import of Timber and Timber Products, 2011-2015

(Value : USD'000)

Product	2011	2012	2013	2014	2015
Logs	714,756	602,556	766,690	816,545	651,967
Sawntimber	1,504,075	1,335,062	1,415,996	1,464,440	1,216,900
Veneer	206,191	184,086	171,425	167,564	157,145
Mouldings	323,611	297,692	268,846	284,669	243,679
Particleboard/Chipboard	879,852	829,578	808,816	895,347	740,508
Fibreboard	461,046	429,932	443,941	454,488	401,758
Plywood	931,072	823,110	857,773	902,770	778,085
BJC	932,185	908,240	1,047,899	1,203,071	974,161
Furniture	5,603,927	5,338,898	5,526,103	5,985,994	5,289,593
Others	2,156,161	2,049,180	2,196,238	2,331,138	1,977,682
TOTAL	13,712,876	12,798,334	13,503,727	14,506,026	12,431,478

Source: International Trade Centre

Germany's Export of Timber and Timber Products

Germany's export of timber and timber products in 2015 decreased 14% to USD14.3 million over the previous corresponding period. Germany exported

mainly furniture, fibreboard, sawntimber and BJC. Exports of furniture totalled USD6.9 million, a decrease of 13% from USD7.9 million in the previous year. At the same time, exports of fibreboard totalled USD1.8 million followed by sawntimber at USD1.7 million and BJC at USD1.2 million.

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Germany: Export of Timber and Timber Products, 2011-2015

(Value : USD'000)

Product	2011	2012	2013	2014	2015
Logs	428,460	362,385	365,582	409,481	355,318
Sawntimber	2,098,746	1,809,074	1,970,975	2,159,211	1,728,301
Veneer	235,630	184,705	176,373	182,657	160,375
Mouldings	287,775	235,749	229,014	227,457	183,632
Particleboard/Chipboard	858,174	767,813	803,558	778,261	642,146
Fibreboard	1,939,478	1,869,981	1,935,951	1,950,447	1,764,444
Plywood	336,468	266,996	273,077	286,641	252,097
BJC	1,331,670	1,213,262	1,342,342	1,422,034	1,190,538
Furniture	7,880,872	7,492,489	7,607,790	7,912,098	6,893,022
Others	1,420,090	1,320,290	1,355,402	1,402,718	1,156,525
TOTAL	16,817,363	15,522,744	16,060,064	16,731,005	14,326,398

Source: International Trade Centre

Malaysia's Export of Timber and Timber Products to Germany

In 2015, exports of Malaysian timber and timber products to Germany registered a decrease of 6% to RM198.6 million from RM210.9 million in 2014.

Germany ranked twenty from the overall Malaysian export destinations with 0.9% market share. Wooden furniture was the main product exported with a total value of RM76.9 million, followed by mouldings at RM63.1 million, sawntimber at RM46.4 million and BJC at RM9.6 million.

Malaysia: Export of Timber and Timber Products to Germany

(Value: RM)

Product	2011	2012	2013	2014	2015	% Change 2015/2014
Logs	472,004	193,720	0	0	0	0.0
Sawntimber	66,684,677	56,168,816	50,437,827	47,006,026	46,406,008	-1.3
Plywood	4,452,107	9,451,209	3,986,889	4,541,979	1,391,292	-69.4
Veneer	146,925	228,828	71,976	38,171	23,374	-38.8
Mouldings	86,446,922	100,367,764	55,936,925	57,004,372	63,057,246	10.6
Chipboard/Particleboard	647,690	0	0	109,169	0	-100.0
Wooden Frame	147,899	0	0	195,325	13,130	-93.3
BJC	16,035,015	17,536,093	13,645,657	10,357,297	9,607,952	-7.2
Wooden Furniture	71,891,580	83,765,006	66,059,853	89,107,505	76,902,747	-13.7
Rattan Furniture	250,192	686,305	40,000	1,575,243	112,360	-92.9
Others	3,561,771	1,309,628	1,852,982	916,332	1,110,607	21.2
TOTAL	250,736,782	269,707,369	192,032,109	210,851,419	198,624,716	-5.8

Source: MTIB & DOSM

Malaysia's Import of Timber and Timber Products from Germany

In 2015, imports of Malaysian timber and timber products from Germany recorded an increase of

67% to RM78.3 million from RM47.0 million in 2014. Sawntimber was the main product imported with a total value of RM30.1 million, followed by wooden furniture at RM29.5 million and veneer at RM3.6 million.

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Malaysia: Import of Timber and Timber Products from Germany

(Value: RM)

Product	2011	2012	2013	2014	2015	% Change 2015/2014
Logs	2,005,801	2,214,320	3,181,646	2,090,297	1,546,019	-26.0
Sawntimber	14,854,834	22,469,231	30,451,983	20,436,957	30,107,258	47.3
Plywood	788,594	410,239	159,035	588,095	587,018	-0.2
Veneer	4,978,695	4,647,303	2,282,840	1,854,725	3,590,512	93.6
Mouldings	70,894	5,613	67,076	22,019	278,463	1,164.6
Chipboard/Particleboard	866,434	1,090,930	527,303	560,041	587,430	4.9
Fibreboard	294,257	596,555	85,644	269,439	562,981	108.9
Wooden Frame	0	9,000	17,834	0	0	0.0
BJC	123,854	22808	29616	98,276	86,518	-12.0
Wooden Furniture	10,935,613	8,349,590	10,062,305	12,405,381	29,526,823	138.0
Rattan Furniture	404,504	1,089,478	295,365	2,211,164	906,004	-59.0
Others	8,938,163	9,083,300	9,470,648	6,469,760	10,535,850	62.8
TOTAL	44,261,643	49,988,367	56,631,295	47,006,154	78,314,876	66.6

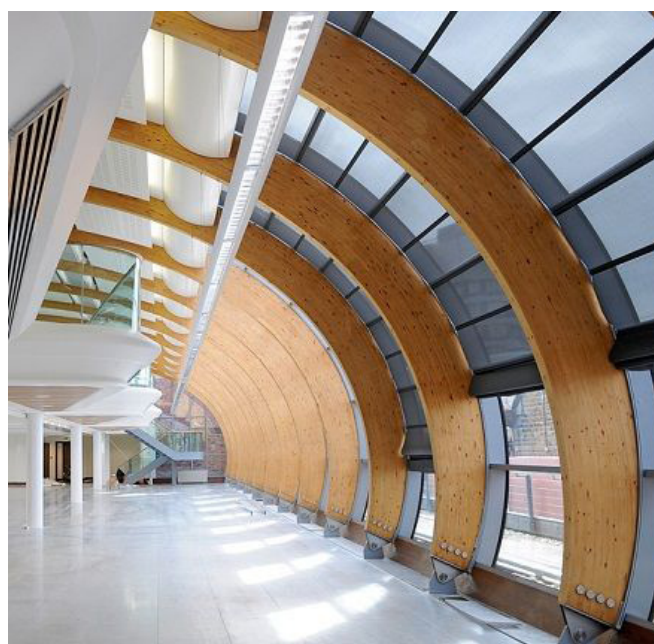
Source: MTIB and DOSM

Import Tariff

Germany's import duty on timber and timber products ranges from 0 – 10%. Details are as follows:

Hs Code	Product	Duty (%)
4401	Fuel Wood	0
4402	Wood Charcoal	0
4403	Logs	0
4404	Hoop Wood	0
4405	Wood Wool and Wood Flour	0
4406	Sleepers	0
4407	Sawntimber	0 – 2.5
4408	Veneer	0 – 6
4409	Mouldings	0
4410	Particleboard	7
4411	Fibreboard	7
4412	Plywood	6 – 10
4413	Densified Wood	0
4414	Wooden Frames	0 – 2.5
4415	Packing Cases	3 – 4
4416	Cask, Barrels, Vats and Tubs	0
4417	Tools Bodies and Handle	0
4418	BJC	0 – 3
4419	Tableware and Kitchenware	0
4420	Wood Marquetry	0 – 4
4421	Other Articles of Wood	0 – 4
9104-9403	Wooden Furniture	0 – 5.6

Source: WTO



Germany was the birthplace of glued laminated timber construction (Hetzer 1906).

Prospects

The Eurostat Construction Production Index shows that the EU construction sector activity turned upward in the last quarter of 2015 and the rising trend continued towards the first quarter of 2016. Strong construction activities in Germany contributed to the positive trend and helped to offset weakening activity in the UK and Poland. In addition, the level of building permits for both residential and non-residential construction was very stable throughout the year 2014 and 2015, therefore, suggesting continuing improvement in the sector activities. There is good demand for

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Germany ranks among the densely wooded countries in Europe. Around one third of the national territory are covered with forests.

housing and microeconomic forecast are quite positive. It is expected that in 2016 Germany's construction sector will grow by 2% compared to the previous year.

Despite the positive outlook of the construction sector in Germany, the high cost for domestically sourced logs have driven sawmills to increasingly source raw materials from neighbouring countries where the log prices are much lower. Germany is the world's second largest importer of softwood logs and the import trend has substantially increased over the past five years. In addition, tropical wood imports into Germany were also rising consistently in 2015 and towards the first quarter of 2016.

Based on the positive outlook and opportunities in the country, Malaysian exporters should take full advantage of the rising trend in the residential and

non-residential construction activities along with the increased preference for wood in construction projects to further promote Malaysian timber and timber products especially value-added products such as furniture, BJC and mouldings, in addition to only promoting building materials namely sawntimber and plywood. Malaysian timber exporters need to enhance their presence in the market and continue to improve networking with Germany's timber importers through various promotional activities.

References:

Department of Statistics Malaysia
MTIB's statistics
International Trade Centre
www.fordaq.com
Forest facts – German forestry 



Jelutong Dyers app

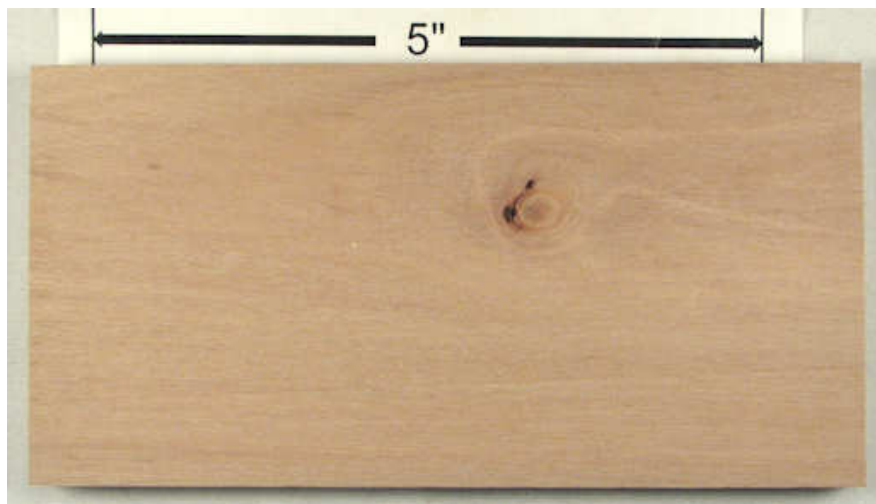


Malaysian Wood
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Lukisan Seribu Makna, Kayu Eratkan Semua
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RU - SUITABLE FOR ELECTRIC POST



Texture of Ru

Ru or *Casuarina equisetifolia* is a tree species within the family Casuarinaceae. It is also known as Pink-tinyu (Myanmar), She oak (Australia), Ru laut (Sarawak), Aro (Philippines), Aru (Indonesia), Pek nam (Lao PDR), Son tha le (Lao PDR), Son thale (Thailand), Ku (Thailand), Agoso (Philippines), Agoho (Philippines), Ru (Malaysia), Aru (Malaysia), Ai samara (Indonesia), Cemara laut (Indonesia), Filao (France), Whistling Pine (Viet Nam) and Caay Phi lao (Viet Nam).

Casuarina is from the Malay word 'kasuari', from the supposed resemblance of the twigs to the plumage of the cassowary bird. One of the common names of *Casuarina* species, 'she-oak', widely used in Australia, refers to the attractive wood pattern of large lines or rays similar to Oak but weaker. The specific name is derived from the Latin 'equinus', pertaining to horses, and 'folium', a leaf, in reference to the fine, drooping twigs, which are reminiscent of coarse horse hair. It is distributed in Peninsular Malaysia, Myanmar, Australia, Philippines, and islands of the Pacific.

Botanic Description

Casuarina equisetifolia is an evergreen, dioecious or monoecious tree 6-35 (60) m tall, with a finely branched crown. The crown is initially conical but tends to flatten with age. The trunk is straight, cylindrical, and usually branchless for up to 10 m, up to 100 (max. 150) cm in diameter, occasionally with buttresses. The bark is light greyish-brown, smooth on young trunks while rough, thick, furrowed and flaking into oblong pieces on older trees. The inner bark is reddish or deep dirty brown, astringent. The branchlets are deciduous, drooping, needlelike, terete but with prominent angular ribs, 23-38 cm x 0.5-1 mm, greyish-green, articles 5-8 mm long,

glabrous to densely pubescent, dimorphic, either deciduous or persistent. The twigs are deciduous and entirely green or green only at their tips.

The minute, reduced, toothlike leaves are in whorls of 7-8 per node. The flowers are unisexual; the perianth is absent, replaced by two bracteoles. The male flowers are in a terminal, simple, elongated spike, 7-40 mm long, borne in whorls with 7-11.5 whorls/cm of spike, with a single stamen. The female is inflorescence on a short lateral branchlet, cylindrical, cone-shaped or globose, 10-24 x 9-13 mm; the bracteoles are more acute, more or less protruding from the surface of the cone. The infructescence is a woody, conelike structure while the fruit is a grey or yellow-brown winged nut (samara) with a solitary seed.

Biology

C. equisetifolia is wind pollinated. The trees are mostly monoecious. Female cones mature about 18-20 weeks after anthesis and open shortly after this, releasing small samara. The fruit on a tree does not all mature at the same time, often presenting a problem for seed collection. In cultivation, *C. equisetifolia* hybridizes with *C. glauca* and *C. junghuhniana*.

Ecology

The climate in its natural range is semi-arid to subhumid. In most regions there is a distinct dry period of four-six months, although this seasonality decreases towards the equator in Southeast Asia and in the southern parts of its range in Australia.

C. equisetifolia is commonly confined to a narrow

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strip adjacent to sandy coasts, rarely extending inland to lower hills, as in Fiji. It is found on sand dunes, in sands alongside estuaries and behind fore-dunes and gentle slopes near the sea. It may be at the leading edge of dune vegetation, subject to salt spray and inundation with seawater at extremely high tides.

C. equisetifolia may be the only woody species growing over a ground cover of dune grasses and salt-tolerant broadleaved herbs; it can also be part of a richer association of trees and shrubs collectively termed the Indo-Pacific strand flora.

Anatomic Description of Wood

The wood is diffuse-porous. Vessels in diagonal and or in a radial pattern. Vessels are exclusively solitary (over 90%). Occasionally the tangential diameter of the vessel lumina is 100 micras or less. Coloured deposits are in the heartwood vessels. Occasionally vessels are less than 6 mm². Occas Apotracheal axial parenchyma are diffuse and or diffuse in aggregates. Occasionally prismatic crystals are in chambered axial parenchyma cells and or in the fibres. There are five to eight cells per parenchyma strand; over nine cells per parenchyma strand. Axial parenchyma are in narrow bands of four to 10 rays per mm (medium); rays are more than 10 per mm (abundant) and are of two distinct sizes. The ray's height is more than 1 mm and occasionally, larger rays are more than four seriate and are aggregated. Fibres are with distinctly bordered pits. Air-dry density is 859 – 1120 kg/m³.

General Wood Descriptions

Colour – Heartwood is darker than sapwood, heartwood is brown or brownish or dark brown, sapwood is pink-brown.

Texture – Coarse and uneven

Grain – Straight, spiral and wavy

Durability – It is durable when exposed to weather, but must be treated for use in contact with ground. Natural durability index = 3 (very high durability = 1, very low durability = 7)

Resistance to Impregnation - The sapwood treats readily. The heartwood is extremely resistant to impregnation.

Workability

Rotary Veneer Cutting

Stock is reported to be too hard for plywood

production.

Sliced Veneer

Stock is reported to be too hard for plywood production.

Machining

When dry, it is difficult to work with machine tools because of its high density and hardness.

Planing

Some chipping may occur in quarter sawn faces.

Mouldings

This species is difficult to mould.

Boring

This species is easy to bore.

Mortising

This species is easy to mortise.

Finishing

Wood of this species gives a smooth finish.

Response to Hand Tools

When dry, it is difficult to work with hand tools because of its high density and hardness.

Products

Fuel : The highly regarded wood ignites readily even when green, and ashes retain heat for long periods. It has been called 'the best firewood in the world' and also produces high-quality charcoal. Calorific value of the wood is 5000 kcal/kg and that of the charcoal exceeds 7 000 kcal/kg. It has been used for both domestic and industrial fuel such as for railroad locomotives. In Asia, leaf litter from plantations is often removed to be used as fuel.

Fibre : The wood is used to produce paper pulp using neutral sulphate and semi-chemical processes, and as a raw material for rayon fibres.

Timber : *C. equisetifolia* yields a heavy hardwood with an air-density of 900-1000 kg/m³. Heartwood is pale red, pale brown to dark red-brown, moderately to sharply differentiated from the sapwood, which is yellowish or pale yellowbrown with a pink tinge. Grain is straight, slightly interlocked or wavy; texture fine to moderately fine and even. Shrinkage is moderate to very high, and in the latter case the wood is difficult to season due to severe warping and checking. Wood is hard to very hard and strong. The heartwood is highly resistant to pressure treatment, but sapwood is

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amenable to such treatment. Heartwood is also resistant to dry-wood termites. On sawntimber, the rays are prominent on radial faces. Uses include house posts, rafters, electric poles, tool handles, oars, wagon wheels and mine props.

Tannin or Dyestuff : The bark contains 6-18% tannin and has been used extensively in Madagascar for tanning purposes. It penetrates the hide quickly and furnishes swollen, pliant, soft leather of pale reddish-brown colour.

Medicine : Root extracts are used for medical treatment of dysentery, diarrhoea and stomach-ache. In West Malaysia, a decoction of the twigs is used for treating swelling and the powdered bark is used for treating pimples on the face.

Services

Erosion Control : Since it is salt tolerant and grows in sand, *C. equisetifolia* is used to control erosion along coastlines, estuaries, riverbanks and waterways. In Malaysia and Indonesia the species is protected because of its importance in controlling coastal erosion.



Casuarina equisetifolia are planted to control erosion.

Shade or Shelter : Many areas where the species naturally occurs are susceptible to tropical cyclones or typhoons, and its general tolerance to strong winds has encouraged its use in protective planting. The abundance of highly branched twigs absorbs wind energy amazingly well. In areas with hot, dry winds the tree protects crops and animals herds. In South China, an estimated 1 million hectares has been established in shelterbelts along the coastal dunes.

Reclamation : It grows vigorously on barren, polluted sites and thrives in deep sandy soils. It also colonises sterile tin tailings.



Ornamental : It is grown as ornaments along streets and seashores.

Boundary or Barrier or Support : It is remarkably suited for boundary planting as it does not intercept much of the incoming solar radiation and yields substantial quantities of green leaf manure on lopping besides other products.



Intercropping : With high productivity and properties that enhance soil fertility, *C. equisetifolia* shows promise as an agroforestry species for arid and semi-arid areas. Experiments at Prabhunagar, India, showed citrus trees grew larger under *C. equisetifolia* than in pure stands.

References

Wood Species of Sabah - UMS

<http://www.tropicaltimber.info/specie/agoho-casuarina-equisetifolia/#lower-content>

http://www.worldagroforestry.org/treedb/AFTPDFS/Casuarina_equisetifolia.PDF

<http://www.hobbitthouseinc.com/personal/woodpics/beefwood.htm>

<http://irapl.altervista.org/botany/main.php?taxon=casuarina+equisetifolia>

<http://www.forestryimages.org/browse/detail.cfm?imgnum=5277003>

<http://08hachi.blogspot.my/2011/08>

http://www2.ctahr.hawaii.edu/forestry/trees/Bishofia_Cupressus.html





MTIB Kelantan and Terengganu officials with their families at Family Day held from 13 to 14 May 2016 in Terengganu. A few MTIB officers from HQ also attended the event.



Workshop on Introduction to Karas and its Plantation Auditing Techniques organised by MTIB for its personnel on 1-3 June 2016. Seen here the group photo at Karas Plantation in Empangan Jus, Melaka.



MTIB participating in Hello Komoditi at Sungai Besar, Selangor on 7 June 2016 (left) and at Kuala Kangsar, Perak on 10 June 2016 (right). The programme was organised by the Ministry of Plantation Industries and Commodities.



Puan Hj. Nurchahaya Hashim, MTIB Deputy Director-General (centre) posing with companies that had participated in the GMP - 5S 2015. The event took place on 24 June 2016 in Muar, Johor.



Awareness Programme on Good Manufacturing Practices (GMP) - 5S organised by MTIB on 28 June 2016 in Penang.