



Left: Some of the logs awaiting transportation to the inspection station at the *matau* of Lepar Forest Reserve in Maran, Pahang. **Bottom:** Sorted PEFC-certified wood at One-Tech's green factory in Kuala Lumpur.



'Em-bark-ing' Towards Sustainability: A Closer Look at the Timber Industry

A report from the MTC Media Familiarisation Trip

by Joanna Lee, *Furnish Now* writer

Wealth is standing in Malaysian forests. It's beyond the RM23.2 billion total worth of wood and wood products, including furniture and wood panel products exported in 2017, and the fact that Malaysia is the eighth largest furniture exporter in the world. It's about the richness of our forest's heritage, preserving the beauty of our environment, and sustaining the wood and furniture industry.

To help stakeholders in the timber and furniture industry understand the efforts undertaken to ensure that the next generation can inherit and still enjoy our forests, the Malaysian Timber Council (MTC) invited members of the media, including *Furnish Now* for a sneak peek into the industry's ecosystem and processes (upstream and downstream) to see what has been done to ensure its sustainability. The council was set up under the Ministry of Primary Industries with a mandate to market and promote Malaysian timber

products globally.

"The industry is going through a transformation and we're trying to work with them [the industry] so that the landscape will further grow to support the industry," said MTC's CEO Mr. Richard Yu, during a briefing at the start of our trip.

One of the things Mr. Yu highlighted was the timber industry's "3D's" label. "We want to be known as 'Discovery, Delightful and Desirable'," he said. "This means the industry is always in a discovery mode to come up with products, which always delight consumers and as a result, anything related to wood in Malaysia would become a magnet and be desirable. This would be a departure from what people would know as 'dirty, dangerous and demeaning'" he explained.

At the meeting, we also met with Mr. Mohd Yusoff Ismail from the Licensing and Inspectorate Division of the Malaysian Timber Industry Board (MTIB). He explained MTIB's role in the industry, which includes ensuring that no illegal logging occurs, and

shared interesting facts about the Malaysian timber industry.

After the warm welcome from MTC's team and meeting with Mr. Mohd Yusoff Ismail, we departed for the first stop of our trip where we discovered a glimmer of hope that could pave the way for the 'delightful' and 'desirable' aspect of the 3D's strategy.

We entered the compound of One-Tech (M) Sdn Bhd. The vibrant 26-year-old family-run business is situated on a 13,000 sq. ft. factory. Every aspect of their company is a model of green manufacturing practices, a testament to their 2013 mission of being a world-class green lifestyle solutions provider, with the aim of putting sustainability right at the core of their company.

Company Director Mr. Harith Ridzuan, also known as Harith the Green Carpenter (HGC) said, "We're not a company producing green products, but we're a green company involved in the manufacturing of products."

Certifications based on sustainably sourced timber

These products include green furniture; interior fit out; products made from raw sustainable eco-materials such as Malaysian-produced bamboo planks, rubberwood and kenaf; and homeware and décor items, all under five eco brands (of which three are patented). They are also ISO-certified with the latest PEFC certification. (PEFC is an international umbrella organisation that endorses national forest certification systems developed through multi-stakeholder processes and tailored to local priorities and conditions.)

While at One-Tech, we also met Malaysian Timber Certification Council Senior Manager (Forest Management) Ms. Siti Syaliza Mustapha and Product Manager Ms. Sabrina Haji Mawasi, who explained the council's role in promoting sustainable forest management. The MTCC runs the Malaysian Timber Certification Scheme (MTCS), which is endorsed by PEFC and allows MTCC to grant the important "Chain of Custody" certification for timber and timber products, which could then carry the PEFC logo.

Mr. Harith said when he first started out in the industry, he had noticed the problem of waste in the manufacturing

processes and said he had to do something about it. "We decided to take action and be the change," he shared. Using the 5S and LEAN management system to reduce waste and increase efficiency, they have managed to reduce their wood waste from 30 percent to just 5 percent this year.

Looking around the factory, we noticed they work with pellets and salvaged wood from old buildings to be repurposed, plantation wood like rubber and acacia, and other sustainable wood. They are also involved in R&D. For their homeware brand Dapo, OTSB won the Japanese Good Design Award 2018 and had the opportunity to display their product at the Good Design Marunouchi store in Tokyo.

One-Tech also invests in the next generation of talent in the wood product industry through its Teaching Factory, which trains about 20 students from different backgrounds each year in a two- to six-month internship.

"We try not to be the bad 3D's," Mr. Harith chuckled. "We don't want to be seen as the last resort for employment, but we want to attract high quality graduates to this industry and make the wood manufacturing sector as appealing," he added.

With their family-friendly factory compound and impressive, thoughtful

designs, One-Tech's ambition to go global seems set on the course forward.

The furniture industry can take a leaf out of One-Tech's experience in thinking how to solve sustainability issues, reducing waste and creating a legacy worth passing down to the next generation while sharing generously. For Mr. Harith, there seems to be no fear of ideas or resources running out as they work hard not only for their own but for the community and ultimately, industry's good.

Next, we made our way out of Kuala Lumpur towards Kuantan, Pahang.

Top: One-Tech aims to attract more youths to the industry by its internship programme and a factory thriving on sustainable practices and innovative designs.

Bottom: One-Tech's office is a showcase of its penchant for natural design and repurposing of material to reduce wastage.





Up close: How we manage our forests

Rain drizzled down from cloudy skies as we drove towards Hutan Simpan Lepar. We were greeted by sights of gigantic cut tree trunks resting horizontally at a vast clearing known as a *matau*, an area where logs are collected to be transported to their next destination.

Here on the muddy clearing, Kuantan/Pekan/Maran District Forest Officer Mr. Ismail Ali Kamarudeen walked us through how they practice Selective Management System (SMS), an intricate, yet systematic process, in which the forestry department works with loggers on a system of accountability.

The SMS system means the forest manager is responsible to ensure the concessionaires who log at the permitted area, only at Permanent Reserved Forests (PRF), fulfil the requirements before, during and after harvesting the logs.

We endured a short, but exhilarating, four-wheel drive to the logging area, with wheels threatening to slide on the rain-kissed mud roads.

Alas, we didn't get to witness how they cut the trees as the loggers couldn't work at all, due to the heavy rainfall in the past few days. Nevertheless, Mr. Ismail said we could still see the logging work area inside the forest reserve.

"SMS means this area has been given a permit for logging," said Mr. Ismail. SIRIM also audits them before their permit is granted or extended for a period of time. He added that as long as the permit is valid, Pahang timber would qualify as PEFC worthy for export to European countries.

Pre, during and after cutting

The arduous pre-felling inventory task has showed that there were 176 "mother" trees here and 88 protected trees — fruiting trees or trees that are habitat for animals like bees, for instance. The best four "mother" trees per hectare are chosen for the next generation or rotation of 25 to 30 years. They provide the "anak" or baby trees.

The SMS system also means the need to ensure the direction of the felling to ensure the least damage to other trees.

"After logging, we will immediately have to plant new trees along the way,

Top Left: Mr. Ismail pointing to a Merawan Jangkang 'mother tree' which has a blue tag in the permitted logging area while Mr. Saiful takes a snapshot

Top Right: Pahang State Forestry Officer Mr. Ismail, 2nd from left, introducing Head of Gambang Inspection Station Mr. Nasir, 2nd from right and his deputy, Mr. Sharizal, right

Bottom Right: Muddy roads leading to the logging at Lepar Forest Reserve in Pahang

even at the log holding areas like this one you saw, all under the SMS system," he said.

He pointed to a map of the licensed logging area and an information summary of the area, the name of the licensed company, the contractor, estimated taxes to be collected from the logs, number of tags for different species. For this area, we saw that an estimated 367 damar trees have been tagged or designated for logging.

Trees cannot be cut and won't be tagged if the diameter is less than the stipulated number for each species according to their inventory and census of the area's availability of matured trees marked for cutting. For instance, the Chengal tree's trunk must not be below 70 cm in diameter (at chest height). For trees with resin (dipterocarps), the

diameter limit is 60 cm and 50 cm for non-resin trees.

Mr. Saiful Azmi Mat Aazid who heads the tagging and grading unit in that area patiently explained how they colour code the tagged standing trees. Blue for mother trees, yellow for protected species trees, white for trees permitted for logging and orange for trees that need to make way for the transporting roadway inside the forest.

He said, "There are 10 species which are under the 'red list', the endangered species which cannot be cut including keruing laying, padi, paya and meranti quantinesis, which won't be tagged at all."

Mr. Ismail told us how the forestry department monitored the concessionaires: "We periodically monitor, but it's monthly for (shorter period) licenses like these, we check their logging boundaries, the trees that they have felled, their workers, workers' quarters, the roads they have made for transportation and the environment of the permitted logging area.

Pahang has about 70 licensees per year on average, including those on government and private land.

If a forest has already been

harvested before (non-virgin forest), logging is limited to 75 sqm per hectare for standing trees.

Tracing the tree logs: Gambang Inspection Station

At the mobile checking station or tree inspection station, its purpose is to check for the correct amount of taxes received by the state government from the licenced loggers against the number of logs logged. Simple? It looks like a complicated process but rest assured, Mr. Mohamad Nasir, the head of this inspection station at Gambang, has been at it for decades.

He showed us the "sistem integrasi maklumat perhutanan" (SIMP) or Integrated Forest Information System programme online, where how much tax has been paid for the logs is captured.

Once the lorries with logs arrive from the *matau*, they measure the logs. After measuring, they check if the numbers match with a logbook that has an inventory of all the trees in the permitted logging area.

"They'll then take the invoice, check the tagging record, go to the lorry, inspect the lorry and measure the

logs, and enter the information into the system. If everything tallies, they will hand over an authorised hammer to the company to mark their logs. Taxes are implemented according to the species of the tree," Mr. Saiful explained.

Mr Ismail told us the Pahang State Forestry Department is in the process of testing and launching a new system called "Teknolog", where on each log, there will be a QR code so it can be scanned for immediate information of each log. The tagging number would indicate the tree's species and size.

Currently, they have to measure each and every log at the inspection station, a time-consuming task. "With Teknolog, the onus is shifted to the concessionaire to measure the logs. If measurements are found wrong, they will be fined. So, we only need to measure 10 percent of each batch for counterchecking measures. If there are 30 logs, we'll just measure 3 logs, for example. This is to ensure the right taxes are collected for the trees logged under license," Mr. Kamarudeen said.

We saw how much of a paper trail they had. It's a process which involves careful inventory and counterchecking with expertise, to identify those majestic, beautiful living trees, training for cutting trees, and more counterchecking thereafter as state taxes and permits are involved.

As we sit on wooden chairs, looking at wooden panels, cupboards and floorings, we could imagine this is what trees and the people who manage them go through. Furniture industry players can also play a more active role in making sure the selective forest management system won't be abused and to keep encouraging best practices while taking opportunities to engage more and keep up-to-date with timber news, for instance, through MTC and other relevant bodies. No timber, no furniture. And this is a responsibility for all involved.

With that, we then digested what an intricate system the SMS was over lunch and headed towards HLM Wood Products Sdn Bhd.



Top: One of many log books and the authorisation hammer to be given to concessionaires to brand logs after taxes and inspections are cleared.

Right: The authorisation hammer given to stamp logging concessionaires logs once taxes and inspections are cleared.



Is the industry looking at a sunset?

Back in Kuala Lumpur, we gathered before the Malaysian Timber Conference welcoming dinner for a debriefing to conclude our familiarisation trip.

We saw the great effort taken by each factory and player in the industry to step up to sustainability challenges. Malaysian timber and wood products are mostly exported. They are of international quality and beautifully designed as evident One-Tech, HLM Wood Products, Robina Flooring. The high production capabilities and efforts in innovations and sustainability shown by Maran Sawmill and Mentakab Veneer and Plywood are also noteworthy.

Mr. Yu surmised what we witnessed in a few points: There's awareness that our raw materials are dwindling or face an inconsistent supply. Thus, there

have been programmes to sustain the environment and production . . . even bringing in raw materials from overseas.

Nevertheless, the many factories we saw face human resource problems. Although Mr. Yu said sectors like furniture have many second-generation successors groomed, overall, we are still relying on foreign workers, hence there's a need for the industry to look towards automation, especially in the light of Industry 4.0 and a need for highly skilled workers. There's also a mismatch between what is taught at universities, and what is in the real world, in order to meet the industry's needs.

Mr. Yu said for the industry to embody the 3D's – be desirable, have discovery and be delightful – we have to be convinced about it ourselves. He emphasised the need to look into solutions together.

If we could help consumers of furniture and wood products to

appreciate the value of trees and the hard work that goes behind producing every item, how would this add value to the furniture industry products, innovations and services? From the success of the factories we saw, it seems that to create something of value is a long term growth mindset, an investment that goes beyond merely making some profit for today.

However, MTC remains optimistic and committed in their programmes to assist the industry's continued growth. "They said the industry is a sunset industry, but the sun will rise after it sets," said Mr. Yu.

Editor's Note: Organised in conjunction with the MTC Malaysian Timber Conference, the 2019 Familiarisation Programme for Local Journalists was held on July 22 to 25 in Peninsular Malaysia.



Top Left: The VIPs standing together with the 10 conference speakers

Top Right: From left - Mr. Wong, Mr. Ravi Muthayah, YB Mdm. Kok, Dato' Low, Mr. Yu

Bottom Left: Dato' Low Kian Chuan delivering his welcome speech at the Malaysian Timber Conference 2019

Bottom Center: Minister of Primary Industries YB Mdm. Teresa Kok with opening remarks at MTC 2019

Bottom Right: Datuk Seri Shamsul delivering the keynote closing speech of the Malaysian Timber Conference 2019