

# Oil palm trunk: An untapped resource



## OIL PALM TREES

Malaysia has approximately 14.5 million acres of oil palm trees that needed to be replanted every 20-25 years. Felled trees provide an abundant source of OPT.

In Malaysia, the palm oil sector is the main producer of bioenergy, with a considerable volume of biomass waste created each year and only a tiny percentage turned into value-added goods.

The depleting global forest resources combined with an increasing

environmental awareness has led to businesses and consumers looking for alternative sustainable sources of wood.

With pressure on timber resources within Malaysia and increasing competition for wood fibre around the world, new sources of usable raw materials such as oil palm trunk (OPT) can prove to be important in the future for not just furniture but timber-based construction materials.

## TRANSFORMING OIL PALM TRUNKS INTO SUSTAINABLE MATERIALS

IOI Palm Wood (IOIPW) is one of Malaysia's first manufacturing plants to commercially and sustainably convert

unused OPT into eco-friendly and sustainable wood panels for the furniture and building industries.

Established in June 2020, IOIPW is a joint venture between IOI Corporation, a global palm oil plantation conglomerate, and Hans Peter Fitch. The vision of IOIPW is to create new materials using the biomass available from the mature and established cultivation of oil palm. The oil palm trunks, which are left to rot in the field after replanting, constitute approximately 20% of the total biomass.

Fitch, CEO of IOI Palm Wood, emphasised that for many years the timber industry has been frustrated with the lack of raw



The IOI Information Hub was unveiled last December at the Ground Floor East Wing at IOI City Mall

materials, as the industry primarily used rubberwood.

He said: “With less and less rubberwood being available, it has always been my ambition to find a sustainable and alternative material. And with OPT, I can see the immense potential of this material to be used not only in Malaysia but in Thailand, Indonesia, West Africa and South America as a substitute for tropical timbers and rubberwood.”

Commencement of production of the first 21-acre palm wood manufacturing plant located at Mukim Pogoh, Segamat,

Johor, is due by the end of 2022. The new plant equipped with kiln drying and panel production expertise and technology has a production capacity of approximately 80,000m<sup>3</sup> per annum of palm products under the OnCore brand to supply to the local and overseas market.

**HIGH-PERFORMANCE MATERIALS PRODUCED SUSTAINABLY**

IOIPW’s OnCore brand, which offers a range of products including kiln-dried palm wood, blockboards, palm wood panels and palm wood core materials are designed to meet the rising demand

for high-quality wood panel solutions.

The name OnCore refers to palm wood’s core of inner fibres that are like ‘reinforced concrete’ that gives the wood its strength. Stronger than some conventional timber, palm wood is also lighter and more eco-friendly.

The production of palm wood is supported by their innovative manufacturing processes and customised technologies from Europe. As IOIPW aspires to offer a range of high-performing and environmentally sustainable wood that conform to international standards and certifications for quality and safety, the OnCore brand will be marketed to expanding demand for office, household furniture, and building construction materials.

**MAKING PROFIT WITH PURPOSE**

Fitch elaborated: “For every cubic metre of palm wood produced, we are in effect capturing approximately 250kg of carbon, which would otherwise be released into the atmosphere as carbon dioxide or methane. We are also contributing to the circular economy by eliminating waste as we are using everything from a palm tree.

“We will start with the development of engineered materials produced from the humble OPT, which is sustainably available from existing plantation replanting programmes. In the future, we may even consider engineering materials from the fronds, which constitute almost 60% of the available biomass.” P

**ORIGINS OF THE NAME, ONCORE**

This palm wood is not such a beautiful wood with all its rough and heavy fibrous texture. But the core is beautiful because of its inner fibres that are like reinforced concrete that give the wood its ultimate strength.



Hans Peter Fitch, CEO of IOIPW, looks forward to changing the world positively with OnCore