

Palm wood: A sustainable alternative to counter deforestation



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LEGEND

- 1 OnCore Lumber Core
- 2 OPT offcuts can be used as biofuel

Deforestation has become a critical global concern, posing significant impacts to biodiversity, ecosystems, and the climate. However, innovative solutions are proving to be difficult and far few to address this issue. In an effort to reduce deforestation, IOI Palm Wood (IOIPW) is leveraging technology to transform unused waste from oil palm trunks (OPT) into sustainable palm wood materials to be used for furniture and building industries.

At IOIPW we are not looking to totally replace natural timbers, but to find ways to substitute the use of wood for lumber cores, especially in doors, furniture panels and other engineered products. Recognising the potential of OPT as an unutilised biomass material, IOIPW is stepping up to repurpose this once considered waste resource into sustainable engineered materials.

When oil palm trees reach the end of their productive life, the trunks are typically left to decay as waste in plantations. This decaying process generates carbon dioxide and other greenhouse gasses such as methane. By utilising innovative technology, the conversion of OPT into palm wood not only addresses the issue of waste management but also provides a sustainable alternative to over exploitation of timber resources.

ADVANTAGES OF PALM WOOD

Sustainable sourcing: Harvesting palm wood from OPT mitigates the need for logging natural forests. This sustainable sourcing helps conserve valuable ecosystems, protect biodiversity, and maintain the balance of natural resources.

Carbon sequestration: Palm wood, derived from OPT, acts as a carbon sink, capturing and storing carbon



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dioxide. This attribute significantly mitigates adverse impacts on climate change, as it helps reduce overall greenhouse gas emissions.

Versatility in applications: At the current stage of research and production, palm wood is suitable to serve as a core material for various applications. As the palm wood industry continues to evolve, the potential for innovation and diversification of products is vast. Ongoing research and development, coupled with the passage of time, can unfold the versatility of palm wood to further reduce the reliance on tropical wood sources and contribute to the conservation of natural forests.

In the manufacturing process, OPT offcuts are the pieces left over when IOIPW produce palm wood. Instead of allowing the offcuts to become another type of waste, we use this biomass for the generation of renewable energy. By using OPT offcuts as biomass fuel, we are tapping into a renewable energy source, and by using biomass fuel we can eliminate the use of fossil fuels, which is a cleaner alternative, as it reduces greenhouse gas emissions. Using OPT offcuts as biomass fuel means we are minimising waste and maximising the value of every part of OPT.

The conversion of OPT into palm wood represents a real reduction to deforestation. From OPT to the creation of palm wood, to the use of OPT offcuts as biomass fuel, this is a sustainable cycle where every stage has a purpose. Our journey is not just about making products; it is about making greener choices for a more caring, inclusive natural world. As the palm wood industry grows, it not only provides economic benefits but will also contribute to the global effort to protect the natural ecosystem and reduce harmful greenhouse gas emissions. **P**

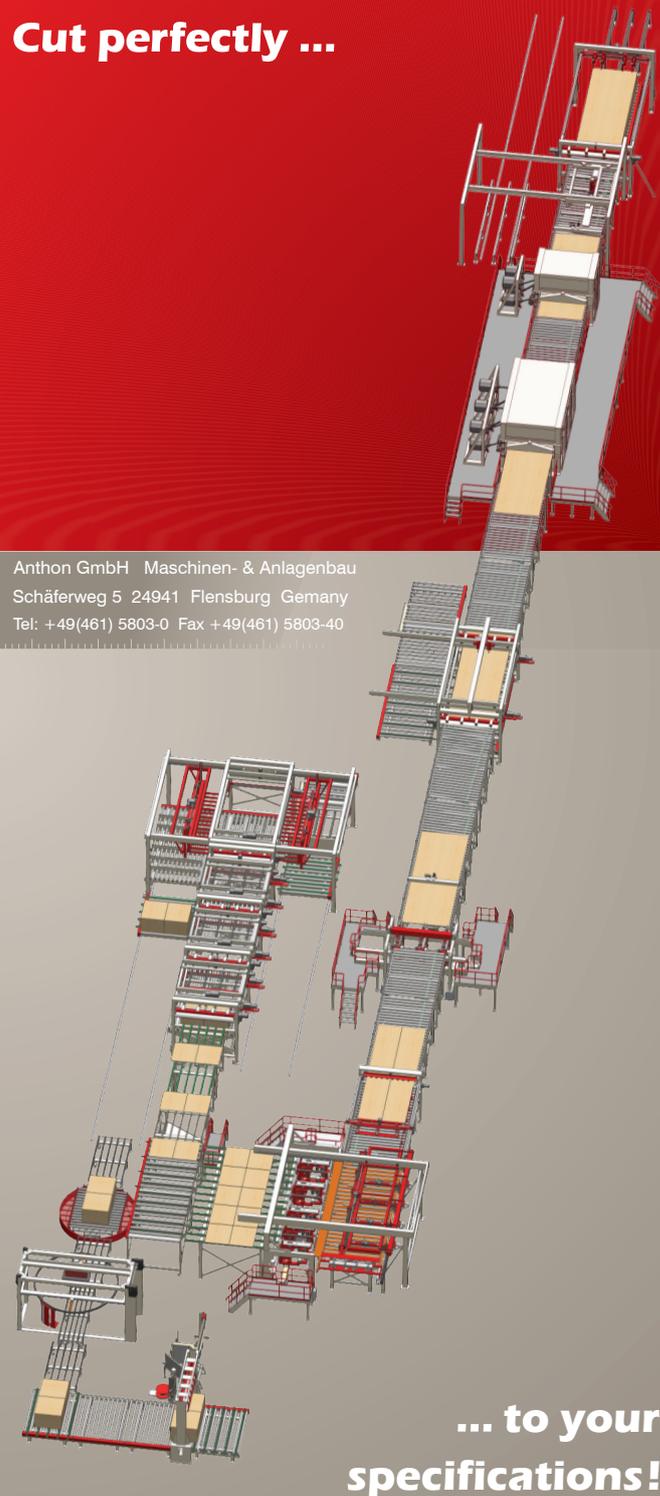


Inspiring the next “material revolution” by creating sustainable and high-performance materials from oil palm waste, **Peter Fitch**, together with IOI, have set up IOI Palm Wood to commercialise this untapped potential.

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