

**YACHTING  
FOR  
FORESTS**



# **RESPONSIBLE SHIPBUILDING WITH FSC<sup>®</sup>-CERTIFIED WOOD**

Let's protect forests while exploring the ocean





# Introduction

## From the forests to the oceans

Forest-based products have historically formed a key part of shipbuilding and are still an important part of maritime tradition and yachting design trends. Today, timber and other forest-based products may only make up a small part of a ship, but the impact of these components is nevertheless significant.

Timber is a key element in shipbuilding and is mostly used in products such as ship decks, interiors, flooring, and various fittings. Timber products in the shipping industry are often made of species from tropical forests. As precious timber species, such as natural teak and mahogany-like species, form an important part of maritime tradition, the sector is under critical observation.

Some suggest entirely discouraging the use of timber in shipbuilding in order to avoid contributing to deforestation and the destruction of forests. However, this would be oversimplifying a complex situation and potentially lead to even more deforestation. Responsibly sourced forest products can support and promote more sustainable management of tropical forests as well as all other forests.

A procurement policy on forest-based products is an effective way of ensuring that everyone in your organisation knows what products are acceptable to buy and use. It can also help you set and meet corporate social responsibility targets.

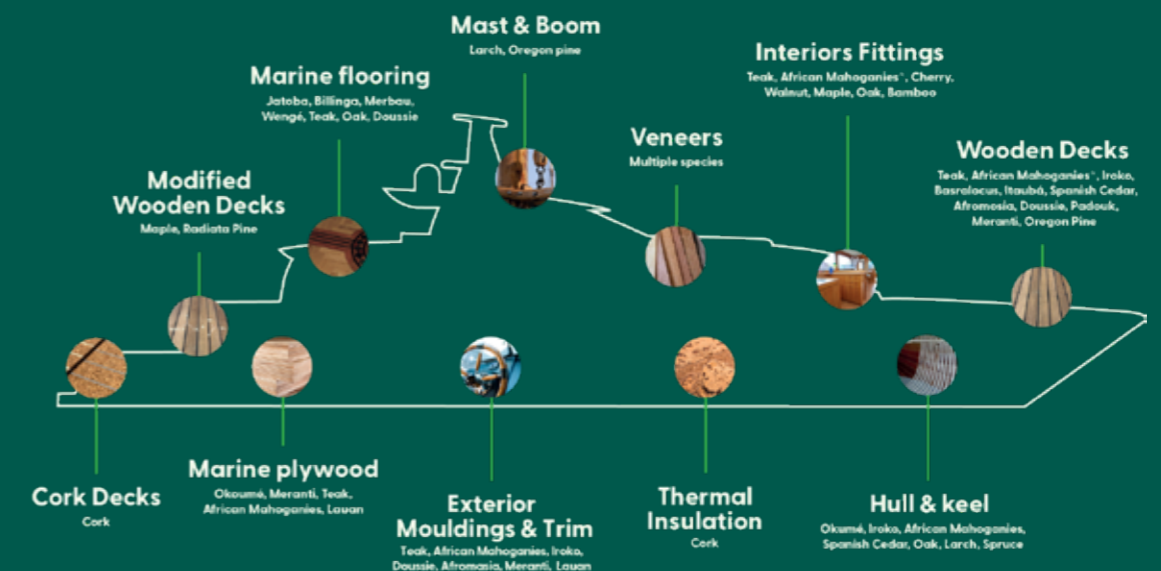
The yachting sector has the potential to be a frontrunner when it comes to communication and innovation on tropical timber. In line with an increasing focus on bio-based materials, we are also seeing a new era in the innovation of wood as a replacement for fossil-based products or artificial fibres with various types of negative environmental impact.

The shipbuilding industry is increasingly expected that to be able to provide documentation for its environmental impact, and Forest Stewardship Council® (FSC®) has produced a guide on how to implement, monitor and communicate a policy for forest-based products.

The guide includes recommendations on how to use FSC's Chain of Custody solutions to document and communicate responsibly sourced forest-based products.

The project benefits from the support of Prince Albert II of Monaco Foundation

[www.fpa2.org](http://www.fpa2.org)



Forest-based products used in shipbuilding



# Responsibly sourced timber in the yachting industry

This initiative coordinated by FSC Denmark and supported by the Prince Albert II of Monaco Foundation (FPA2) aims to ensure a higher uptake of timber from responsible sources in the yachting industry.

The project is part of a wider range of activities initiated by FSC to support the promotion of sustainable forest management through certification and use innovation to strengthen the business case for responsible forest management.

This is the latest initiative supported by the Prince Albert II of Monaco Foundation that in 2010 launched the Wood Forever Pact with the aim of helping yacht builders to use timber harvested from sustainably managed forests.

The aim of the project is to investigate the current market situation in the yachting industry, to highlight the solutions available and to initiate development of new procurement policies and efficient strategies to limit negative impact on forests.

A recurring challenge is not the goals that are set, but rather how to achieve them in practice and document the fulfilment of those goals. This work focuses on contributing to practical implementation.

# Forests for all for ever

Forests are vital to life

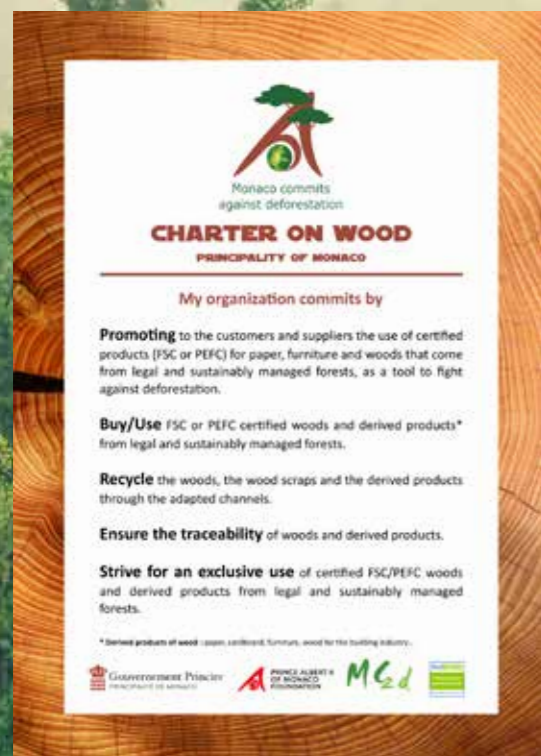
Without forests, life on earth would cease to exist. Forests regulate our climate, clean the air we breathe and are the source of much of our drinking water. Around the world, forests support 1.6 billion people and provide habitat for 70% of terrestrial wildlife and plants.

Forests also offer a renewable supply of resources that are essential to our quality of life. Unfortunately, many forests no longer exist. Thirty-million acres of forest are lost each year, the equivalent of 36 football fields every minute. Deforestation is responsible for nearly 20% of all greenhouse gas emissions—more than the entire transportation sector.

Forests are also vital for the livelihood of forest-dependent communities around the world and for providing important resources and income.

If no safeguards are set, your procurement may lead to mismanagement of a forest, often in the form of deforestation and degradation of forest systems. This tends to lead to the loss of important habitats for many forest-related species. It has a negative impact on the climate due to forest fires, resulting in erosion of the forests' carbon stocks combined with changes to the physical conditions that contribute to balancing the weather and climate systems. Soil erosion could lead to floods.

People who work and/or live off the forests may be exposed to horrific and unhealthy working conditions, and it is often the world's poorest people who fall victim to the worst consequences of environmental deterioration.





# Innovation needed

Teak (*Tectona grandis*) is the world's most iconic tropical hardwood species used in ships. In newer history, this strong and durable timber species rich in water-, weather- and pest-resistant natural oils is best known as beautiful and iconic non-slip decking material for luxury yachts.

Having spoken to shipbuilders and long-time timber traders, the FSC can only draw one conclusion: "There is no substitute species that offer the technical qualities and beauty of natural teak".

Due to the popularity of the species, the land area planted with teak is increasing and has been doing so for decades – and the species is typically grown in productive plantations for the many supply chains using teak. But this development is of little help to the yachting industry seeking the maximum durability, strength, and beauty only found in old natural teak.

Only a few plantations have reached maturity, and only a few countries in Southeast Asia still have old teak forests left, but these have declined rapidly in recent decades. The timber from these forests is often on the radar of NGOs and authorities questioning the origin, the legality, and the sustainability of the timber.

Most significant is the attention surrounding 'Burmese teak' – the commonly used tradename for the high-quality teak from Myanmar. This teak is now more than ever linked to the stories of conflict and the unstable political situation in Myanmar – a country moving in and out of embargoes.

In recent years, the European Timber Regulation (EUTR) has made it illegal to import timber from Myanmar, but stories of illegally logged timber smuggled out of Myanmar and ending up as decking on luxury yachts still seem to resurface from time to time.

Teak alternatives need to be developed with innovation and tested on a bigger scale. There is a need for multi-solution approaches to investigating species alternatives, cutting techniques and the latest knowledge of wood technology such as modification.

Optimally, not just a single solution should be sought, but approaches that cover wood from the tropical forests as well as the more temperate forests – and from natural forests as well as plantations.

# The First FSC Project

## 26' FSC YACHT - 'IJSVOGEL'

The sailing yacht Ijsvogel (The Kingfisher) was completed in June 2003 and was exhibited at the HISWA Boat Show 2004 where it was first introduced to the general public.

Behind the yacht was a unique partnership set up to promote FSC-certified wood and new alternative timber species in the yacht building industry. This was the first ever sailing yacht built entirely in FSC-certified wood. The partnership consisted of Stichting Doen, Stichting Ecohout, Nationale Postcode Loterij and Wereld Natuur Fonds (WWF NL). The yacht is designed by Olivier F. van Meer Design and built at Scheepstimmerbedrijf Prins by Johan Prins.

The woods used in the construction were Indian Padauk (Padauk Amboina) for the decking, Louro Vermelho (Wane) for the hull, Sucupira for the keel, Lauan for plating and Oregon pine for the mast. Back in 2004 when the Ijsvogel was built, FSC project certification was not yet available.

This early FSC demonstration project was not just the first yacht made entirely of FSC-certified wood. It was also an early pilot for what would later become project certification.

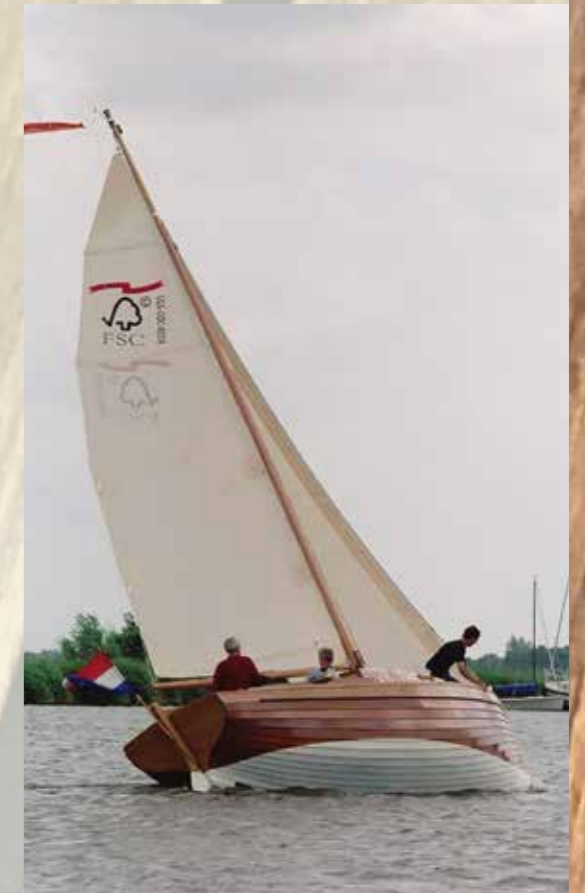


Photo: Tjapko de Heus



# FSC Certified Plantations

## Improving Plantation Management

FSC recognises the pressure placed on the world's forests from the ever-increasing demand for timber resources.

Natural forests alone are not able and should not be expected to supply the world's need for wood and fibre. More intensive production systems are needed for this.

Since growth rates of many plantation tree species exceed those of species in natural forests, production-oriented plantations can achieve concentrated production of wood of consistent quality, which helps to reduce wood harvest pressures on natural forests. Indeed, plantations already play a vital role in supplying wood and other products.

Plantations can also offer a second commercial opportunity to some of the popular species that are in some ways limited in more natural forests or species that are in some way restricted. That goes for species such as Natural Teak (*Tectona grandis*) which appears in limited form in natural forests or species that are protected under CITES such as Spanish Cedar (*Cedrela odorata*) and Mahogany (*Swietenia macrophylla*).

While plantations cannot replace the richness, stability and beauty of natural forests or the complexity of the services they provide, applying the FSC standards to plantations ensures that management is defined by transparency and fairness and minimises negative environmental and social effects.



Photo: Stockphoto.com

# Replacing Natural Teak

## Van Styn - using Brazilian Teak

Van Stijn Rijnwoude B.V. (Van Styn) is a Dutch supplier of quality wood products. Its core business is the production of veneered panels and sandwich panels as well as the processing of multiplex, MDF, HPL and solid wood. Van Styn produces high-quality panels, used in the yacht, interior, special vehicle, bus and door manufacturing industries.

Finding a replacement for natural teak is a market challenge that Van Styn has sought to solve by sourcing quality teak from old plantations found in South America.

The durability of this teak is found by Van Styn to be durability class 1. Under the product name 'VSR Green Teak' they offer sliced veneer, round logs cut and deck strips. VSR Green Teak is available as FSC® 100%

[www.vanstyn.nl](http://www.vanstyn.nl)



Photo: Van Styn



# Reuse and recycle

## Verification of reclaimed materials needed

The FSC Recycled label was introduced to recognise the important role that recycling paper and timber plays in protecting the world's forests.

Unlike general 'recycled' claims, which require no verification, the FSC Recycled label provides assurance that all the wood or paper in a product has been verified as genuinely recycled.

The use of FSC Recycled paper and wood can help to reduce the demand for new wood fibres and thereby help to protect the world's forests. As recycled wood becomes more widespread, the greater the need to ensure that recycling actually means recycling. An FSC certification can verify this.

A recycled wood policy is not just about using recycled wood. It is far from certain that recycled wood in all cases can meet the technical requirements that apply to wood used at sea. But there are more ways to contribute to a more circular sector.



- **Support design trends that ensure greater uptake and better utilisation of recycled wood**
- **Contribute to infrastructure that collects and sorts recycled wood for new purposes**
- **Design for disassembly to make sure that as much wood as possible can be separated efficiently**
- **Join partnerships that will ensure new life for waste wood**

# Tropical production creates value

## A new and better story of tropical timber

Tropical timber is nowadays often – by default – presented as a problem. But there is more to the story than meets the eye. Sometimes the bad stories overshadow a forest and timber sector that is increasingly switching to sustainable timber sourcing and has set targets for becoming more aware of market requirements. Irresponsible or illegal removal of timber from tropical forests is still a huge problem, but conservation efforts need to widen their scope which also includes natural resources and their sustainable management.

International demand for timber is an incentive for the development of sustainable forestry in tropical forests. Without this demand, there is a risk of certification being abolished, and the area could become vulnerable to illegal logging or other kinds of land use at the expense of forests. It is therefore important to purchase timber from sustainable tropical forestry to support responsible development in the tropical areas while setting aside land for strict conservation.

### Gabon takes the lead

The country of Gabon, well known to the shipbuilding industry for production of plywood mainly made of the species Okumé (*Aucoumea klaineana*), has set ambitious standards for its forest commitments and land planning in general, including areas set aside for nature conservation.

Back in September 2018, the President of Gabon Ali Bongo Ondimba – took an important step towards sustainable forest management by declaring that all forest concessions operating in Gabon would have to be certified by FSC. The Gabonese government aims to gain economic benefits from the national forest sector and increase income levels from EUR 500 million to EUR 3000 billion in contribution to GDP by 2025.

Involvement in the forest sectors and local production can help such countries, and responsible procurement requirements can motivate these ambitious policies through business opportunities.



Photo: FSC Denmark



# Timber species diversification

## Creating awareness

Tropical forests contain a wealth of lesser known timber species. Many of these offer untapped potential to cover our construction and design needs. Did you know that there are more than 70,000 species of trees around the world dominated by the tropical species? Yet only a small proportion of these has been properly tested for specific applications.

Lesser-known timber species are currently underutilised compared to their potential. Bringing them from well-managed forests to the market could relieve pressure on the most popular species and increase the product range of these forests which are currently limited in harvest volumes by principles of low impact logging and single-species considerations.

Tropical timber is characterised by certain natural advantages such as strength, durability, and an incredible variation in look.

With many thousands of timber species available, the potential is worth investigating. Rich opportunity exists for sharing responsibility for our tropical forests. Manufacturers, architects, engineers etc. are able to support product development on behalf of Africa, Latin America and Southeast Asia and contribute to future-proofing forest preservation.

## FSC Species Database

FSC Denmark has developed a database for LKTS. It includes both specific case studies and technical data. New case studies are continuously added. Use the database to search for the type of structure you will be building, the species you usually use and identify alternative timber species as well as examples of buildings and products in which the various species are used.

Find out more at:

[www.lesserknowntimberspecies.com](http://www.lesserknowntimberspecies.com)



Photo: FSC Denmark

# Masters of diversification

## 130 species in stock

Vandecasteele Houtimport is a family-run timber company founded in Belgium in 1883 and is today run by the fourth and fifth generations of the Vandecasteele family.

The company is the biggest stockholder of certified tropical timbers in Europe and the company specializes in the import, trading and export of tropical hardwood from Africa, Southeast Asia and South America alongside a broad selection of different timber products from Europe and North American.

In all they import, stock and distribute hardwood and softwood from around the world to over 30 countries and maintaining an extensive range of products, including more than 130 different timber species in stock.

Companies like Vandecasteele Houtimport enables the full supply chain to diversify their use of timber species.

[www.vandecasteele.be](http://www.vandecasteele.be)



Photo: Vandecasteele



# Non-timber forest products (NTFP)

## More than timber

Forests are mostly known as a source of wood-based products such as timber, pulp, and paper. Other parts of trees and forest resources known as non-timber forest products (NTFPs) can be harvested for local needs or on a greater industrial scale and obtain FSC certification.

Non-timber forest products are important resources for rural, and even urban, populations worldwide. Especially in tropical regions, NTFPs can provide a range of social and economic benefits at the local, regional, and international levels and have the potential to diversify income sources for forest operations.

### Some of the most common NTFPS are:

*Nuts, essential oils, plant extracts, resin, Christmas trees, pine cones, seeds, maple, sugar, honey, mushrooms, latex, bark, fruits, straw, wicker, rattan and meat.*

Cork, bamboo and rubber are of particular interest to the shipbuilding industry.



Photo: MoSo

**YACHTING  
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**We invite you to join  
the yachting for forests pact  
today...**

By signing the Yachting for Forest pact, you send a strong signal to your clients, employees, and network that you aim to support the world's forests when sourcing. Joining this pact requires that your company undergoes a process specifying its targets on the procurement and use of forest-based products.

Learn more:  
[www.yachtingforforests.com](http://www.yachtingforforests.com)





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