**Editorial**

The Wood Forever Pact program has now more than four years of existence. Two yacht builders and ten designers have joined forces with the Prince Albert II of Monaco Foundation in order to raise environmental awareness in the yachting industry.

If undeniable improvements have been performed on the motorization or grey and black water treatment, still a lot needs to be done for the materials which compose or equip the yachts to be sourced sustainably.

First among them is wood. Too many years of denial which led to the destruction of entire forests, the devastation of the biodiversity and the displacement of populations for a simple deck in a particular essence.

Nowadays solutions do exist. Your yacht, product of excellence, must be a showcase of green natural products in its composition. What is the point of enjoying the marine environment if it is at the expense of tropical forests?

The Wood Forever Pact proposes, on a technical level as well as through communication, to make the yachting industry progress towards environmental responsibility.

We need each one of you - builders, owners, designers, captains - working as a whole, to make the yachting industry a luxury environment which is exemplary at all levels of sustainable development.

"Let’s sail together towards a fairer world which would be more respectful of natural resources."

---

**Philippe Mondielli, PhD**  
Scientific Director  
Prince Albert II of Monaco Foundation

---

<table>
<thead>
<tr>
<th>Content</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Editorial</td>
<td>p.........1</td>
</tr>
<tr>
<td>Wood Forever Pact Member</td>
<td>p.........2</td>
</tr>
<tr>
<td>Wood Forever Pact Partner</td>
<td>p.........3</td>
</tr>
<tr>
<td>Viareggio SuperYachts, sustainability as a premise</td>
<td>p........4/5</td>
</tr>
<tr>
<td>Designers Interview</td>
<td>p........6/7</td>
</tr>
<tr>
<td>Wood Forever Pact Ambassador</td>
<td>p........8/9</td>
</tr>
<tr>
<td>An expert point of view on teak and its alternatives</td>
<td>p......10/11</td>
</tr>
<tr>
<td>Yacht Club de Monaco, a new eco-friendly building</td>
<td>p......12/13</td>
</tr>
</tbody>
</table>
Wood Forever Pact guarantees all contributions are 100% used for projects and communications (including listing on site and in newsletters) without management overheads being deducted.

Wood Forever Pact

**Member**

**Superyacht Builders** who care about deforestation have the opportunity to make a real difference to the environment by becoming Members of Wood Forever Pact (WFP), the flagship project of the “Monaco makes a commitment against deforestation” initiative, led by the Prince Albert II of Monaco Foundation.

The WFP Member ‘deal’ is simple and straightforward. Builders who sign up for membership of Wood Forever Pact commit to look for certified wood whenever possible in the process of yacht building. They also benefit from Wood Forever Pact technical partners, The Forest Trust (TFT) and the ATIBT (International Technical Association for Tropical Wood), expertise.

WFP, ATIBT and TFT’s aim is to accompany and assist yacht builders in their own aims to use timber from sustainably managed forests – builders can choose to show potential clients their values, transparency and transformation through improvements.

WFP Members can fly the Wood Forever Pact flag on their new builds at launch and use the WFP logos on their marketing materials. WFP members also benefit from WFP communications and introductions to WFP Ambassadors (yacht owners), WFP Partners (suppliers, furniture makers, designers) and WFP Supporters (donors).

**Partners**

**Suppliers of wood, furniture makers and designers** who care about deforestation now have the opportunity to make a real difference to the environment by becoming Partners of Wood Forever Pact, the flagship project of the “Monaco makes a commitment against deforestation” initiative, led by the Prince Albert II of Monaco Foundation.

Suppliers: if you already use only certified wood then you may use the Wood Forever Pact Partner logo and benefit from WFP communications.

Furniture Makers: if you are introducing a range of furniture from certified sources then you may use the Wood Forever Pact Partner logo on these items and benefit from WFP communications.

Designers: if you specify certified woods on your designs and introduce clients (superyacht owners) to WFP then you may use the Wood Forever Pact Partner logo on these items and benefit from WFP communications.

Partners are expected to share information with WFP on efforts they make to improve the supply chain, making proposals to their suppliers or clients in turn.

**Membership fee:**

€ 3500 / 2 years

**Contribution:**

€ 100 / year
At VSY shipyard, we are committed to sustainability throughout the whole supply chain and our target is to have a Supplier Code of Conduct included in all the supplier contracts. The Supplier Code of Conduct is an integral part of any agreement documentation and has been taken into account in all new and renewed contracts since June 2013.

VSY supply chain programme focuses on ethical, reliable, innovative and environmentally sound suppliers, whose quality and pricing will facilitate long-term cooperation and responsible profitability. Our aim is to develop trusting cooperation with selected key suppliers. Our transparent supplier evaluation criterion contributes to the further development of our supplier portfolio.

We were the first European shipyard who signed the agreement and, according to our commitment to the Wood Forever Pact, we are implementing a special Code of Conduct for our wood chain to support sustainable forest management and safeguard rich biodiversity in forest operations. To this aim, our target is to sustain the high amount of certified wood in our yacht production at over 80%. This is a remarkable percentage since only some 9% of the world’s forests are certified.

VSY responsibility criterion covers a wide range of sustainability issues from the preservation of nature values and legal origin of the wood to social issues such as safety at work.

Furthermore, we are setting up a specific programme to share with all the nautical sector the promotion of sustainable forestry - fulfilling the obligations of the European Union Regulation No 995/2010 (EU Timber regulation) - and requiring environmental responsibility from the suppliers. In addition to the Environmental Policy, our operative programmes are guided by the Sustainability Principles which, in addition to environmental responsibility, include comprehensive business, economic and social responsibility.

At VSY, we have taken up the challenge of new necessary business models able to substantiate an innovative vision of the yachting sector and re-launch its fundamental values. Joining the Wood Forever Pact is a great opportunity for the nautical industry to actively promote forest certification initiatives in the whole wood supply issues and networking for a sustainable future.

Viareggio SuperYachts - VSY, sustainability as a premise

VSY, the first European member of the Wood Forever Pact, joined forces with the Prince Albert II of Monaco Foundation in 2012 and strives for sustainability in all aspects of yacht building.
Designers Interview

In 2014, ten designer studios became Wood Forever Pact Partners committing to raise awareness of their suppliers and clients concerning the use of wood sourced from sustainably managed forests. Four of them share their views on yacht design and sustainability.

1. Tell us about your studio: your approach to design and challenges you have faced.

Adam Lay, Director, Adam Lay Studio

Adam Lay Studio is an award-winning boutique interior design company based in Hampshire, England. Working with the best shipyards the world over and with a truly international clientele, we strive to offer a unique experience for our clients based on outstanding design and excellent personal attention culminating in the most bespoke, personally tailored interiors afloat. The studio has an exclusive artisan approach. We produce elegant hand drawings but with the efficiency that’s required to design to a deadline.

I once designed a carved wooden headboard for a large motor yacht. Having produced a sketch during a meeting of how I wanted it to look, I heard nothing more about it until one day I was unexpectedly taken to see a craftsman - an elderly Italian artisan wood carver - who told me that this piece of carving was the pinnacle of his career. He had tears in his eyes, he was so proud of what he was doing. It was relatively simple for me to draw but extremely challenging for him to bring to life in three dimensions!

2. In what way becoming a Wood Forever Pact Partner is in line with the solutions to environmental issues and capacity to raise awareness you developed in your company?

Tony Dixon, Design Director, Redman Whiteley Dixon Ltd

1. To be innovative in our designs and how materials are used to create a unique style in our cabinetry for our client. We approach concepts with a fresh view of its purpose and with the clients stated lifestyle and preferences in mind.

Recently we have worked with quilted maple which has a small wavy grain pattern that is hard to find in good even pattern and only occurs rarely in burr wood. Also, sometimes working on small pieces of furniture like table pedestals can make veneering quite difficult around small radii.

2. We are keen supporters of sustainable materials and we believe our clients will appreciate our concern for sustainable methods of replenishment.

Very favorable reactions are expected as clients become more aware of these issues and generally would like to be associated with responsible methods of manufacture in their yachts.

Tony Dixon, Design Director, Redman Whiteley Dixon Ltd

1. To be innovative in our designs and how materials are used to create a unique style in our cabinetry for our client. We approach concepts with a fresh view of its purpose and with the clients stated lifestyle and preferences in mind.

Recently we have worked with quilted maple which has a small wavy grain pattern that is hard to find in good even pattern and only occurs rarely in burr wood. Also, sometimes working on small pieces of furniture like table pedestals can make veneering quite difficult around small radii.

2. We are keen supporters of sustainable materials and we believe our clients will appreciate our concern for sustainable methods of replenishment.

Very favorable reactions are expected as clients become more aware of these issues and generally would like to be associated with responsible methods of manufacture in their yachts.

Mike Reeves, Partner, Claydon Reeves

1. Claydon Reeves approach to design can be defined by our use of analogue skills in the current digital age; such as model making and hand sketching. Using these we are able to create yacht exteriors and interiors that fuse style with practicality and ensure that we always produce designs that are clean and elegant. There are a multitude of challenges within the yacht design industry - these include a shortage of interior space, maritime regulations, weight restrictions and so on. We are always keen to look at innovative technologies for bold and creative solutions.

In addition to this we have a keen interest in ecological issues and our design philosophy allows us to use only the essential amount of wood and keep waste to the absolute minimum. However, it is only through challenging concepts that you can really move the game forward. A good illustration for this would be our Aeroboat - a high performance boat with a ground-breaking design approach to the use of wood. Wood is used in a sparing manner - 3mm veneer across the hull. The Aeroboat is a prime example of how exciting design can work hand-in-hand with the responsible use of wood.

2. We have joined the Wood Forever Pact as we attach great significance to environmental responsibility. We believe that facing ecological issues must be an ongoing and significant discussion within our business. We must promote ethical wood management - where it comes from, how it is farmed and how it is bought. Finally, as yacht designers, we have the ability to educate people about green initiatives, green alternatives and on how to use these materials.

In order to raise awareness to our clients we always try to promote new alternatives without altering the aesthetic criteria of our vessels, creating, in this sense, a real added value to our product. Thus, we are always eager to develop new alternatives that might offer a different point of view to our clients and one that will permit an opening of the ecological debate.

Dickie Bannenberg, Managing Director, Bannenberg & Rowell Design

1. Bannenberg & Rowell take a holistic view about design: working with all elements of the creative process to produce fresh, innovative but approachable work.

On a 60m yacht completed in Germany a couple of years ago, we designed some furniture pieces using what was called “wormy maple”, actually a veneer from a diseased tree which had a very striking figure, colour and density.

2. We support the initiative to raise awareness of the finite availability of timbers.

I think it’s not necessarily going to be a simple process to encourage owners to understand some of these issues. That said, we have steered at least one Owner to build his yacht to an environmental Classification Society notation, and we frequently specify fast-growing and sustainable grass and cane products.
Owners of Superyachts who care about deforestation now have the opportunity to make a real difference to the environment by becoming, along with their yachts, Ambassadors of Wood Forever Pact, the flagship project of the “Monaco makes a commitment against deforestation” initiative, led by the Prince Albert II of Monaco Foundation.

A single donation, calculated according to the yacht’s displacement, which will be entirely directed towards one of the Foundation’s projects (the owner can opt for a particular one), will make the owner and boat Ambassadors.

As well as the knowledge that one has offset the damage already made to the environment due to the use of wood on the vessel (even though the builder may have used certified timbers), benefits to Ambassadors will include invitations to exclusive events, updates on Prince Albert II of Monaco Foundation Wood Forever Pact projects, the opportunity to network with likeminded owners and an emblem and flag for the yacht.

The one-off ‘offset’ contribution is calculated at 10 euros / tonne displacement (ie a 500-tonne superyacht owner would donate 5000 euros). It is acknowledged that higher displacement yacht construction usually involves the use of more wood and any margins of relative overpayment go towards real action (rather than costly, detailed on-board audits of timbers used).

### Wood Forever Pact Ambassador

Wood Forever Pact guarantees all contributions are 100% used for projects and communications (including listing on site and in newsletters) without management overheads being deducted.

Here are a few projects of the Prince Albert II of Monaco Foundation, focusing on the preservation of forests that you could support by becoming a Wood Forever Pact Ambassador:

- **Developing DNA timber tracking tools for African mahogany (Khaya spp.) and a conservation strategy for Khaya senegalensis in West Africa – Bioversity International**
  
  The Khaya genus is a term defining five species targeted by the African illegal timber trade. It is among the continent’s most valuable sawnwood for export. Policy instruments have been established to reduce illegal logging and associated trade at a global scale but practical control mechanisms to identify species and origin of wood are lacking.

  This project is articulated around the latest technology in the field of wood tracking, using its intrinsic properties. Its aim is to establish a genetic reference database to track the origin of these various species in a more effective way than using paper-based documentation. By directly confronting illegal wood trading it will permit to develop conservation strategies for these precious forests.

- **Integrated rehabilitation of the Ewaso Ng’iro (Kirisia) Ecosystem - Green Belt Movement**
  
  Kirisia forest in the county of Samburu, in Kenya, covers 90,000 hectares and is crossed by the Wuazo N’giro River. This ecosystem is an important resource for the rural and urban populations living at its proximity as it provides water, wood and agricultural soil. However, the biodiversity is threatened and severely degraded due to the important removal of trees.

  Thus, the project, by mobilizing communities and promoting better land use practices through tree planting and better management of the local natural resources, will tend to improve the communities life on an economic and health basis. Indeed, management of resources, good governance and culture of peace are the most important value in the protection of biodiversity.

- **Community Management of Itombwe Nature Reserve – Rainforest Foundation Norway**
  
  Itombwe Natural Reserve in the Democratic Republic of the Congo, is an exceptional site characterized by its spectacular biodiversity and home of indigenous communities depending on the forest resources to survive.

  The project takes into account the necessity to create protected area based on the rights, traditional practices and development of these local communities, hence, ensuring synergy between them and the conservation of biodiversity. The final objective will be to strengthen the capacities of the communities to manage the protected areas and give them the possibility to defend their ecosystem.
An expert point of view on teak and its alternatives

Patrick Martin, Technical Director at the International Technical Tropical Timber Association (ITTTA) offers us his insight on the problematic of teak and the alternatives currently under study.

Could you present the ITTTA and explain its actions?

With over 60 years of technical experience in the tropical timber industry, the ITTTA was founded in 1951 at the request of the Food and Agriculture Organization (FAO) of the United Nations and the Organization for Economic Cooperation and Development (OECD), with the objective to contribute to improving tropical forestry and the rationalization of tropical timber trade. Today, ITTTA has become a partner of choice for various tropical timber stakeholders, European governmental institutions as well as African governments, playing a leading role in the implementation of international programmes related to the sustainable management of tropical forests and the responsible development of the timber industry.

What problems are posed by the use of Teak today?

The economic sanctions imposed by the international community in 2002 against Burma’s military regime, via an embargo which ended in 2013, disrupted the teak market and gave it bad publicity. However the remarkable and unequalled qualities of teak make it an extremely sought after and valued wood. Demand easily outstrips supply; so the pressures of managing this wood are very high and a cause for concern.

Various genetic research programmes and intensive forestry techniques have led to improvements in the conformation of trees and their growth rate. However the quality of the wood may be affected (density, texture, sustainability, stability, colour...). To the extent that forestry management is gauged, plantation forests can provide a quality of wood that is fully equivalent to that of a natural teak forest. However the economic stakes do not provide enough incentive.

Freijo, an alternative to Teak?

Freijo wood comes from South America, more specifically from the Amazon basin (Para State in Brazil in particular). Its colour ranges from beige-yellow to dark greyish brown, often with a marked grain. The overall aspect is similar to walnut or teak.

It is extremely difficult to find a wood species to substitute teak. Freijo is a little less dense and slightly softer; it is less resistant but more rigid.

Freijo dries quickly without difficulty. The risk of cracking and deformation is minimal. Gluing, painting, varnishing and glazing do not present any specific difficulty. It is resistant to fungi but vulnerable to insect attack. It is moisture resistant.

The wooden floor of ITTTA’s stand, during the Carrefour International du Bois 2014 (one of the most important timber tradeshow in Europe, http://www.timbershow.com/) made of doussié, padouk and freijo, has filled several experts with awe, at the sumptuousness of freijo and its resemblance to teak. Indeed, all timber specialists claimed with certainty that they were presented with teak, whereas it was actually freijo. It also did not fail to seduce some manufacturers, who will certainly make it their tropical timber of choice for their projects.

Do any other alternatives exist?

Another wood type that could be used to substitute teak is Izombé. An African timber (Cameroon, Congo, Gabon) with similar properties (even slightly superior) except for stability, indentation and aesthetics. Its durability is similar to Freijo.

However, due to more stringent quality and drying requirements than for teak, which have not been properly controlled, this has quickly led to counter-examples.

A type of treatment which increases the wood’s stability and durability is high-temperature processing. Research on treatment of this type on Izombé could lead to achieving the material sought.

To learn more: http://www.atibt.com/
The new premises of the Yacht Club de Monaco, inaugurated on June 20th, 2014, further strengthen the international appeal of the Principality. Designed by the famous architect Foster, this emblematic building, whose shape resembles a yacht, turns the spotlight on wood, a unique sustainable building material since it is renewable if sourced from a sustainably managed forest.

Overall, the design of the building highlights its aesthetic quality and sustainable aspects in compliance with the Hygiene, Safety, Environment and Quality approach. The building’s passive design offers a careful balance between shade and natural light and the glass façades can be opened up to provide natural ventilation. Photovoltaic cells, low-energy LED lighting, solar thermal collectors and high-performance managements systems for energy, waste and water have been incorporated into the project.

It is in harmony with the spirit fostered by HSH Prince Albert II of Monaco and in line with the Wood Forever Pact which asks the players involved in the yachting sector to pay attention to the origin of the timber used for the furnishings, equipment and construction of yachts.

1. The interior flooring and wooden sections of the ceiling are in European oak (FSC and PEFC certified). This European oak with the appropriate joints, has the same look as boat decks. Its format makes it possible to have large surface areas echoing the same natural movement of wood.

2. The interior facings, cupboards, doors and various pieces of furniture (in Medium Density Fibreboard, plywood or melamine) have been made from PEFC and FSC certified wood.

3. The exterior decking is in FSC certified Tali, an exotic wood from Cameroon. This wood has good physical properties as it is resistant to fungi, dry wood insects and termites, is stable and has a low moisture absorption rate which is particularly recommended for exterior patio decking. Tali wood was chosen rather than another tropical tree, the Elondo, following an environmental benchmarking test carried out by the project management between these two types of wood.

This virtuous approach used by the project management was not straightforward. It was not always easy to obtain the paperwork necessary to verify the certification and origin of the timber. Importers, especially for exotic wood, were not keen to reveal the forest of origin or the name of logging company from whom they were supplied. They had to be contacted several times in order to obtain FSC certification (Chains of custody) and the countries of origin of their timber.

Despite these problems inherent to a complex market in the developing countries, the Yacht Club de Monaco has demonstrated that with motivation and perseverance this flagship building of the Principality is a model of sustainability as far as the materials used are concerned, in particular the wood.
Supporting Partner

MONACO YACHT SHOW

Technical Partners


Villa Girasole - 16 boulevard de Suisse
Tel. +377 98 98 44 44
www.fpa2.com
operationbois@fpa2.mc