

# COCOPALLET MADE FROM COCONUT WASTE TO REPLACE TIMBER PALLETS AND SAVING TREES

[CocoPallet International](#), a Dutch company adopting a *circular economy* approach, has developed and patented the prototype of 100% bio-based, durable transportation pallets made from recycled coconut husk waste.

The technique to produce the CocoPallet® was originally developed by researchers at Wageningen University in Netherlands. In 2010 Michiel Vos, entrepreneur specialized in Circular Economy and Bio Based products, founder of CocoPallet International, joined the work of the University and managed to transform the technological innovation into an entrepreneurial project.

The result of this alliance has allowed to create a new innovative material and [a new product that presents great advantages for the transport of goods and for the environment.](#)

The new material is made using the outer-hairy-part of the coconut waste stream called the husk. Nowadays, only 15% of the waste from coconut production is reused, meaning the remaining 85% is burned, landfilled or left to rot. The pallets are produced close to the coco husk source and creates extra income for local farmers. Furthermore, the farmers can stop burning the coconut husks, reducing the air pollution.

CocoPallets are fully bio-based because they only contain natural fibers and lignin, while ordinary pressed wood pallets, in addition to being more expensive, contain synthetic resins. They also don't require any glue because the coconut husk has its own natural glue called lignin. This natural glue is activated when they grind the coconut husk and press them together at high temperatures. In addition, they are resistant to moisture and termites, key factors for use in tropical areas.

The process used is cheaper compared to using wood, and they don't require the highly toxic methyl bromide fumigation, which some countries still use in the wood manufacturing. The productive process does not use pesticides, synthetics resins, additives or nails.

CocoPallet® export pallets are bio-degradable. After use, the pallets can be shredded, recycled or composted. The



company is exploring ways to use the pallets as soil improver, to give greater added value to this biomass.

CocoPallets have important advantages for the transport of goods because they are stronger and lighter, they are fire retardant, and thanks to an adjusted design, also easier to stack, so they take up less space. Above all, they are cheaper, and a lower price is always the best sales argument for a sustainable product.

In addition to these advantages of the new material, the great environmental value of this innovation consists in having found an alternative solution to replace single-use wooden export pallets.

The CocoPallet website reports that 1.7 billion timber pallets are produced annually for Asian exporters, causing the use of approximately 200 million trees per year. The required softwood, which does not grow in the tropics, is imported from other countries on a large scale. Complete forests are being shipped to Asia to make pallets, that are mainly used to ship products back to America or Europe. The process adopted allows to make the pallets in Asia with local materials. Using coconut husks reduces the demand for new timber and can help to decrease deforestation.

CocoPallet won [important awards and recognitions](#) for the innovation, as a win-win solution that saves millions of trees while also recycling a waste product. The company has a factory in Indonesia and it is in the process of fundraising and finding local partners to build a series of CocoPallet manufacturing plants. The company plans to deliver high volumes of CocoPallet export pallets by the end of 2020.

### To know more

[CocoPallet website](#)

[Article in creativitybay.com](#)

[Article in climate-kic.org](#)

[Article in goexplorer.org](#)

[Article in innovation.biomimicry.org](#)

[Video in Youtube.com](#)

[Article in postharvest.biz](#)

[Article in livingcircular.veolia.org](#)

[Article in bioplasticsnews.com](#)

[Article in lavozdeldespartar.com](#)



## Pallets made of coconut waste

