



## ► Pallets in Brazil

### CONTEXT:

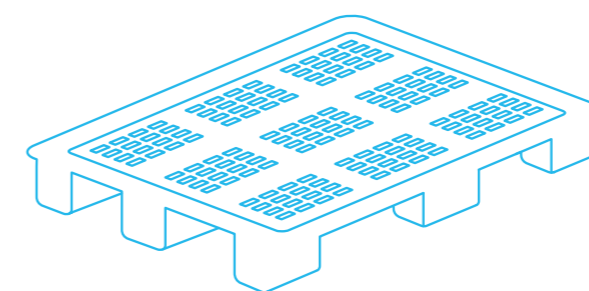
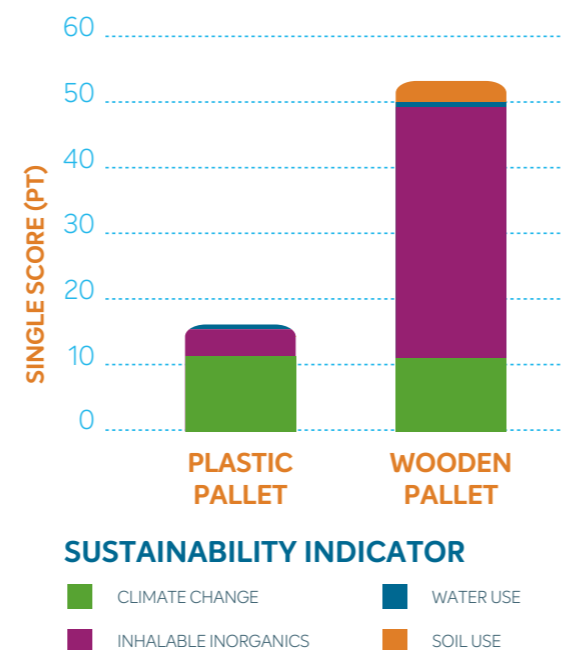
Pallets are key in the logistics operations of the most varied segments.

They can be sold together with the product, referred to as "one way", or operated by logistic agents, so that they can be reused several times.

The most common alternative found in the market today is manufactured from wood specially treated for this purpose. The market for plastic pallets is becoming relevant in specific markets that require sanitation and high resistance, such as the pharmaceutical and food market.

### PROS AND CONS:

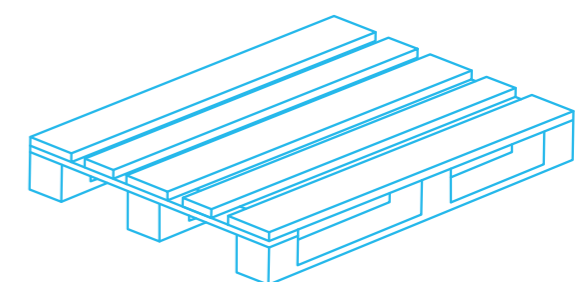
- Although it has a renewable source, the wooden pallet allows a smaller number of reuse cycles. In this way, more wooden pallets are required to carry the same amount of cargo, compared to plastic pallets;
- The use of PE pallets decreases land use by 95%, due to the pine growing forests for the wooden pallet;
- The use of plastic pallets reduces the emission of inorganic inhalants responsible for respiratory diseases by 90%.
- The PE pallet has a greater impact in the resource consumption category due to the transport and production stages of the pallets.



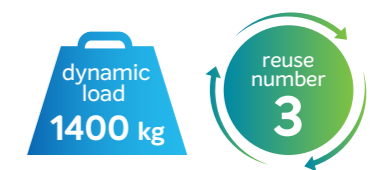
**PLASTIC PALLET**



UNIT MASS **33 kg**



**WOODEN PALLET**



UNIT MASS **35 kg**

### RESULTS:

In the comparative analysis, the polyethylene pallet has shown to be better in most impact categories, except for resource consumption. For the global warming category, the results shown are equivalent. About 70% of the environmental impact of the plastic pallet system originates in transportation, while more than 60% of the impact of the wood system comes from the pallet manufacturing.

When considered as consolidated, the plastic pallet has the potential of reducing up to 70% of the environmental impact compared to the wood system. The superiority of the plastic pallet is mainly due to its number of reuses. Unlike the wooden pallet, which is disposed of after few cycles, the plastic option can be reused approximately 24 times. Thus, fewer pallets are required to perform the same function, reducing the system's impacts.

	PLASTIC PALLETS	WOODEN PALLETS
<b>INHALABLE INORGANICS</b>	1x	10x
<b>NON-RENEWABLE RESOURCES USE</b>	1,5x	1x
<b>SOIL USE</b>	1x	19x