GRENTOM 60

A circular and sustainable hand cart

Hand carts are small carts that can be pushed or pulled by hand, and are typically used to conveniently transport both belongings and small children on a day out. As there are currently no known highly sustainable hand carts on the market, Greentom aims to add a sustainable hand cart to their portfolio

The 'Greentom Go' is a sustainable hand cart that fits with Greentom's vision of becoming a circular brand. It not only uses recycled and recyclable rPP chassis material and rPET textile material for production,

but it also has an incentivized take-back system which encourages users to send back their used Greentom Go free-of-charge in return for a compensation at the end-of-life of the product. A closed-loop circular system in which 90% of products gets collected and 80% gets remanufactured/refurbished enables parts to get a second life, resulting in a product with 62% lower eco-costs, or 64% lower carbon footprint, and 71%€ value capture compared to a product with a linear end-of-life after which products get incinerated

The 'Greentom Go' concludes to be:

1) *simple* in its design since it complies with Greentom's form family style while expressing its own Hand Cart style.

2) easy to use as it is easily (un)foldable, enables children to independently step in and out of the hand cart, allows attachment of Greentom accessories and a baby car seat, and is well manoeuvrable by having large wheels, a pushable handlebar, and by being lightweight (7.57kg).

3) affordable since the reuse of existing and future moulds as well as the refurbishment end-of-life scenario allows for lower total costs enabling a selling price of €220. Therefore, the stated design goal is concluded to be successfully achieved by the Greentom Go.

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Greentom Go: Designing a circular and sustainable hand cart

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