Make a smarter choice for your plants and the planet





LCA shows significant CO₂ reductions when transporting plants in PureFiber™ Horti tray

Critically reviewed life cycle assessment (LCA) study provides transparent, reliable and comprehensive information on the potential environmental impacts of PureFiber™ Horti tray in comparison to other plant transportation trays in the market.

Background

The study compares the entire life cycle of a 100% Nordic wood fiber based PureFiber™ Horti tray with other single-use plant transportation trays. All trays included in the study were evaluated in an equivalent and fair manner using the same functionality, system boundaries, and methodological approach as confirmed during the critical review.

The study comissioned by Stora Enso largely builds on existing knowledge and data presented in a report comissioned by Royal Flora (van Paassen et al., 2020).

Reference

van Paassen, M., & Scholten, J. (2020). Comparative Life Cycle Assessmen of one-way plant trays versus returnable plant trays.

Functional unit

The delivery of 6000 transported plants from Aalsmeer to markets in Germany, UK. France or the Netherlands.

Products

The study covers 2 single-use plastic trays, 3 different cardboard trays and 2 molded fiber trays.



Aalsmeer
Germany
Produced at Stora Ens plant in Hylto Sweden

Climate change impact

The PureFiber™ Horti tray has a lower carbon footprint and depletes fewer fossil resources over its entire life cycle compared to all other trays studied.

Replacing a polystyrene tray with a tray made of PureFiber™ reduces the CO₂ emissions by up to

81%

PureFiber™
Horti tray
requires up to

less fossil fuels over its life cycle compared to other plastic trays.

Title

Comparative LCA of PureFiber™ Horti plant tray with other single use and reusable plant trays

Date 31-5-2023

Place Gouda, NL Authors

Marty Heller, Blonk Consultants

Reusing the tray reduces environmental impacts even more

Experience shows that PureFiber™ Horti tray can be successfully reused and environmental impacts decrease exponentially with the number of reuses.

Sensitivity analysis suggests that after 5 reuses the PureFiber™ Horti tray would have a lower climate impact than the best-performing multi-use plastic tray.

PureFiber™ Horti tray has the lowest CO₂ impact

compared to single-use plastic and cardboard trays



CO₂e emissions for different single use transport trays (6000 plants)

