Andesite Pouch

URTH

Life Cycle Analysis (LCA)

See how the Andesite Pouch from Urth impacts the planet.

Each Andesite Pouch, on average, creates 4.3kg CO₂ emissions

Planting 1 tree sequesters, on average, 307.5kg CO₂

72x positive impact



 \downarrow

How are the CO₂ emissions created?

01. Recycled nylon shell

02. Recycled polyester lining

03. Zipper (brass puller, cord and tape)

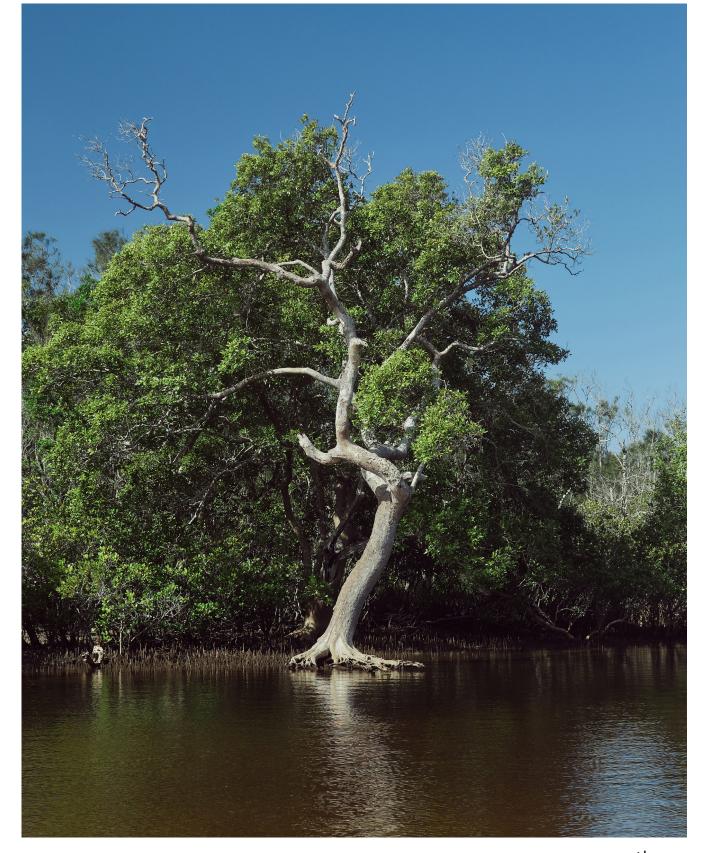
- 04. Inner padding (foam)
- 05. Transport (to warehouse)
- 06. Packaging (Compostable cornstarch & PBAT)



 \downarrow

How much impact does planting one tree have?

We plant mangrove trees for CO₂ offsetting, which absorb an average of 12.3kg CO₂/year for 25 years (the average lifespan of a mangrove).



↓ urth.co

What is the net impact of this product?

During its lifetime, 1 mangrove sequesters more than 72x the CO₂ produced by creating and transporting the backpack.

 $(307.5 \text{kg CO}_2 \text{ sequestered divided by } 4.3 \text{kg CO}_2 \text{ created} = 72 \text{x positive impact}).$

Created per product 4.3kg CO₂

Offset by tree planting 307.5kg CO₂

More about the Life Cycle Asessment (LCA)

Independent audit

We wanted to get a true indication of the impact Urth is having on the planet. So we engaged an independent sustainability auditor – Thinkstep Sustainability Consultancy – to do a thorough Cradle to Gate lifecycle assessment using world-leading GaBi Software.

What's a cradle to gate assessment and why did we use one?

So we could get the most accurate data, Thinkstep recommended a cradle to gate assessment, which tracks impact from resource extraction to local distribution warehouse.

That means courier to consumer, packaging disposal, and end-of-life processes are excluded because there are too many unknowns and assumptions for a reliable assessment. We can be confident in the data from a cradle to gate assessment because the variables are known.

Methodology

The assessment took into account the extraction of raw materials, manufacturing, transport to the airport, freight via cargo plane, and transport to warehouse for distribution.

While the LCA conducted covers a range of environmental indicators, this presentation focuses on the carbon footprint over a 100-year period (GWP100 method following IPCC AR5).

The assessment was performed according to the calculation requirements of ISO 14040:2006 and ISO 14044:2006 – the international standards for Life Cycle Assessment (LCA), and ISO 14067:2018 – the international standard for calculating the carbon footprint of products (CFP).

We're working on growing our positive impact.

If you have any questions or ideas, please get in touch.