

# The impact of our Norite Modular Backpack

Life Cycle Analysis (LCA) Results



## Norite 24L Modular Backpack

See how the Urth Norite 24L Modular Backpack from Urth impacts the planet.



Each Norite 24L Modular Backpack, on average, creates 14.5kg CO<sub>2</sub> emissions.



Planting 5 trees sequesters on average 1537.5kg CO<sub>2</sub>.



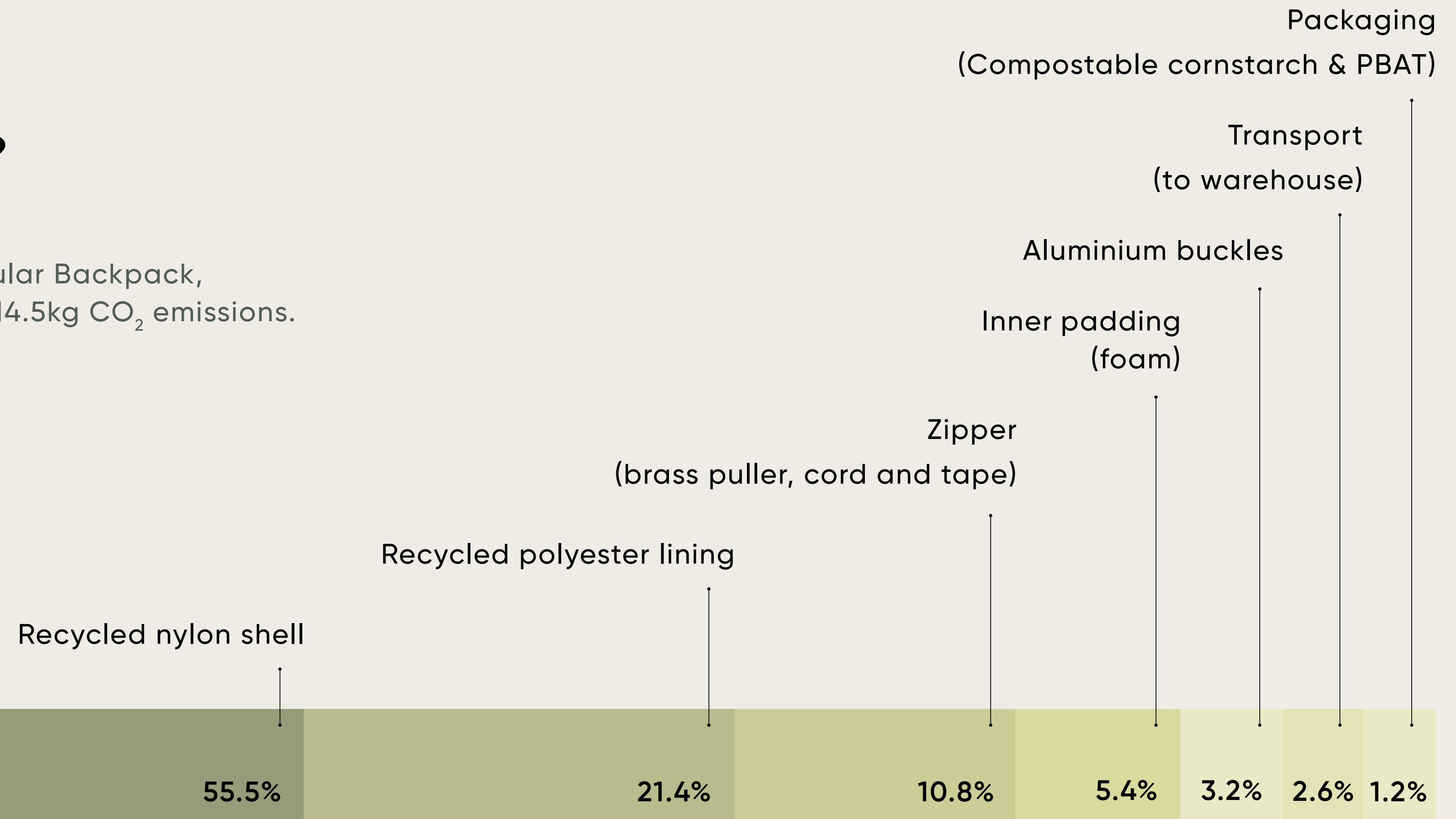
106x Positive Impact.



# How are the CO<sub>2</sub> emissions created?



Each Norite 24L Modular Backpack, on average, creates 14.5kg CO<sub>2</sub> emissions.



## How much impact does planting 5 trees have?



Planting 5 trees sequesters on average 1537.5kg CO<sub>2</sub>.

We plant mangrove trees for CO<sub>2</sub> offsetting, which absorb an average of 12.3kg CO<sub>2</sub>/year for 25 years (the average lifespan of a mangrove).



## What is the net impact of this product?



106x Positive Impact.

**1537.5kg CO<sub>2</sub>**

Sequestered by  
planting 5 trees

During their lifetime, 5 mangroves sequester more than 608x the CO<sub>2</sub> produced by creating and transporting the backpack.

(1537.5kg CO<sub>2</sub> sequestered divided by 14.5kg CO<sub>2</sub> created = 106x positive impact).

**14.5kg CO<sub>2</sub>**

Created per backpack

## More about the LCA Study

### 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 on the planet.**

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

