

Carbon impact report.

Every ingredient we supply replaces the same ingredient produced on purpose, so every order avoids the emissions of growing, processing and transporting it from scratch.

This report explains how we quantify that impact, with two examples from our spice range, calculated on real 2025 orders.



- 01 TRANSACTION-LEVEL PRIMARY DATA
- 02 NZI-ALIGNED METHODOLOGY
- 03 PUBLIC REFERENCE DATABASES
- 04 INDEPENDENTLY AUDITED & VERIFIED

IMPACT TRACK RECORD

6,632 TCO₂EQ AVOIDED
SINCE 2023**3,456 T**VERIFIED 2024 CLAIM
CLIMATE DIVIDENDS**3,327 T**BY-PRODUCTS
REPURPOSED
SINCE 2023

How we count avoided emissions.

Every order is measured the same way: the same delivery, run through two scenarios. Without Hubcycle, the industry destroys a usable stream on one side and produces the ingredient from scratch on the other. With Hubcycle, the existing material is qualified and delivered instead. The difference between the two is the order's avoided emissions, calculated following the **Net Zero Initiative (NZI) guidance on avoided emissions**, on a calculator built with **AKTIO** and independently verified by **Goodwill Management (Baker Tilly Group)**.

SCENARIO A WITHOUT HUBCYCLE

Produced on purpose, twice the footprint.

- A perfectly usable ingredient stream from the food industry is **destroyed**, following each stream's own end-of-life route.
- In parallel, the ingredient you need is **produced on purpose**: grown, harvested, processed and transported for your order alone.

SCENARIO B WITH HUBCYCLE

Same ingredient. Already produced.

- We **recover that existing stream** before it is destroyed and qualify it to food-grade specification.
- We handle any processing and **deliver it to you**. Every kilometre and kilowatt of that journey is counted against the result.

THE CALCULATION

SCENARIO A

-

SCENARIO B

=

AVOIDED EMISSIONS

Computed per order, from that order's actual masses, transport legs, distances and modes, in kgCO₂eq.

01 – Ingredient production

AVOIDED

Emissions of producing the equivalent ingredient from scratch, limited to the life-cycle stages we actually replace: agriculture, processing, upstream transport.

SOURCE: AGRIBALYSE 3.2 (ADEME)

02 – End-of-life treatment

AVOIDED

Emissions of destroying the recovered stream: incineration, anaerobic digestion or industrial composting.

SOURCE: BASE CARBONE (ADEME)

03 – Our own logistics

DEDUCTED

Emissions we induce: recovery transport, processing and final delivery, deducted in full from the result.

SOURCE: ORDER DATA + BASE CARBONE

AUDITED & VERIFIED

AKTIO

Independent carbon-accounting firm. Co-built the calculator; audits data and emission factors every year.

GOODWILL MANAGEMENT

Independent verification of the 2024 claim: 3,456 t CO₂eq avoided, no significant anomaly identified.

CLIMATE DIVIDENDS

Solution registered under the Climate Dividends Protocol (v2.2.1), NZI methodology.

Black Pepper, **heat treated.**



REAL ORDER – JANUARY 2025

REF. D186X

12,424 kgNET MASS DELIVERED
SINGLE ORDER**82.3 T**CO₂EQ AVOIDED
ON THIS ORDER**6.6 kg**CO₂EQ AVOIDED
PER KG SUPPLIED

WHERE THE 82.3 TONNES COME FROM

Ingredient production avoidedFUNCTIONAL 1:1 EQUIVALENT – BLACK
PEPPER POWDER • AGRIBALYSE 3.2**+ 83.1 T****End-of-life treatment avoided**

INCINERATION • BASE CARBONE

**+ 0.6 T****Our logistics, deducted in full**

RECOVERY • DELIVERY TRANSPORT

**- 1.4 T****Net avoided emissions****= 82.3 T CO₂EQ**TO PUT IT
IN PERSPECTIVE82.3 tonnes of CO₂eq is the footprint of driving an average passenger car for about **425,000 km**, more than ten times around the Earth.WHY SPICES
COUNT DOUBLEDried spices carry one of the highest production footprints per kg in the food industry. Substituting them is where a single order moves the needle most: every kg supplied avoids **≈ 6.6 kg CO₂eq.**SAME PRODUCT
FULL YEAR 2025**18**

ORDERS DELIVERED

158.8 T

NET MASS SUPPLIED

1,057 TCO₂EQ AVOIDED IN 2025



Cardamom Husk.

REAL ORDER — DECEMBER 2025

REF. D366X

600 kg

NET MASS DELIVERED
SINGLE ORDER

4.1 T

CO₂EQ AVOIDED
ON THIS ORDER

6.8 kg

CO₂EQ AVOIDED
PER KG SUPPLIED

WHERE THE 4.1 TONNES COME FROM

Ingredient production avoided

FUNCTIONAL 1:1 EQUIVALENT — CARDAMOM
POWDER · AGRIBALYSE 3.2



+ 4.01 T

End-of-life treatment avoided

ANAEROBIC DIGESTION · BASE CARBONE



+ 0.10 T

Our logistics, deducted in full

RECOVERY + DELIVERY TRANSPORT



- 0.05 T

Net avoided emissions

= 4.07 T CO₂EQ

ESTIMATED AVOIDED EMISSIONS BY ORDER VOLUME

ORDER SIZE	BLACK PEPPER, HEAT TREATED	CARDAMOM HUSK
1,000 kg	≈ 6.7 T CO ₂ EQ	≈ 6.8 T CO ₂ EQ
5,000 kg	≈ 33 T CO ₂ EQ	≈ 34 T CO ₂ EQ
10,000 kg	≈ 67 T CO ₂ EQ	≈ 68 T CO ₂ EQ

CONSERVATIVE BY DESIGN

- Real order data: actual net masses, transport legs, distances and modes, never averages.
- Emission factors trimmed to the substituted stages only, so avoided emissions are never overstated.
- Substituted products are strict industrial equivalents, matched on technical and organoleptic function, 1 kg for 1 kg.
- All induced emissions counted against us, including final delivery to your site.
- 15% of avoided emissions reallocated to contractors when processing is done externally.
- End-of-life routes set per stream, never a worst-case default; formerly-fed streams carry a corn-equivalent correction.

NOTES & SOURCES

Figures calculated per transaction with the Hubcycle avoided-emissions calculator (v2.0.4), on 2025 order data, following the Net Zero Initiative guidance on avoided emissions. The calculator was co-built with AKTIO and is audited yearly; the 2024 claim (3,456 t CO₂eq) was independently verified by Goodwill Management (Baker Tilly Group) under the Climate Dividends Protocol. Emission factors: Agribalyse 3.2 and Base Carbone (ADEME), restricted to the life-cycle stages actually substituted. Per-kg intensities vary slightly by order with actual logistics; the scaling table uses each product's 2025 average intensity.

Avoided emissions describe the ingredient's substitution benefit. They are reported separately from a corporate GHG inventory and do not constitute carbon credits or offsets. Detailed calculation files and audit statements are available for review under NDA.

More avoided than we emit: six times over.

Avoided emissions only mean something if the company behind them keeps its own footprint on the table. In 2024, running Hubcycle (collection, processing, logistics, operations) emitted **580 tonnes of CO₂eq**. The same year, the ingredients we delivered avoided a verified **3,456 tonnes**.

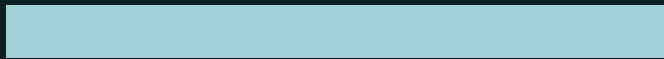
2024, BOTH SIDES OF THE LEDGER

Hubcycle corporate footprint
FULL CARBON ASSESSMENT 2024



580 T

Verified avoided emissions
CLIMATE DIVIDENDS CLAIM 2024



3,456 T

×6

For every tonne of CO₂eq Hubcycle emits, **six** tonnes are avoided by the ingredients it puts back into the food chain.

2024 avoided emissions independently verified by Goodwill Management (Baker Tilly Group) under the Climate Dividends Protocol. Corporate footprint: Hubcycle carbon assessment, 2024. The per-order results on pages 03–04 already deduct all emissions Hubcycle induces to deliver each order. The ×6 figure is an operational handprint-to-footprint ratio: avoided emissions are reported separately from Scope 1–3 inventories and are never netted against them.

Cut your Scope 3 story short.

YOUR INGREDIENTS, MINUS THE EMISSIONS.

3,327 T

BY-PRODUCTS REPURPOSED SINCE 2023

6,632 T

CO₂EQ AVOIDED SINCE 2023

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MORE INFORMATION