

PLANTA PLANTEIGA LIFE CYCLE ASSESSMENT RESULTS FOR PORTUGAL

The Life Cycle Assessment ("LCA") results and claims for the above product are set out below. The LCA methodology and details of the Tool developed for Upfield, the parent company of the brand above, by Quantis is set out in the Annex below.

PRODUCT SPECIFICATIONS

All data and results in this fact sheet are for the following product.

Specification	Description
Product type:	Plant-based spread
Product brand and variant	Planta Planteiga
Market:	Portugal
Product format (grams):	200
Functional unit	1 kg fresh product

The following results are based on a life cycle assessment, from ingredients production through to packaging end-of-life. A total of 16 indicators were assessed: 14 environmental impact indicators from the European Commission Environmental Footprint (EF) 3.0 method and two additional indicators: land occupation (m².y) and water consumption (m³). In order to make comparative assertions, and specific claims on climate, land or water, the overall environmental performance of the Upfield product must be favourable compared to its dairy counterpart, based on all indicators assessed.

ON-PACK CARBON LABEL

0.61 kg CO₂-eq per 100 g

COMPARATIVE CLAIMS

What dairy counterpart is Planta Planteiga being compared to? Dairy butter in Portugal

CLIMATE IMPACTS BY LIFE CYCLE STAGE FOR 1 KG OF FRESH PRODUCT

Life cycle stage	Planta Planteiga	Dairy butter
Ingredients & product manufacturing	2.81	20.1
Packaging production & end-of-life	0.76	0.06
Distribution	2.38	0.07
Use stage	0.05	0.05
TOTAL	6.0	20.2

SUMMARY OF COMPARATIVE RESULTS FOR 1 KG OF FRESH PRODUCT

Indicator	Upfield product	Dairy equivalent	Absolute savings	% savings
Climate impacts [kg CO ₂ -eq/kg product]	6.0	20.2	14.2	70
Land occupation [m ² .a/kg product]	6.5	20.7	14.1	68
Water consumption [l/kg product]	44	179	135.1	75

NOTE: For any given indicator, to make public comparative assertions, savings must be considered significantly lower. If no savings are reported in the table above, the savings are not considered significant; in this case, and in order to be conservative claims are not recommended.

SPECIFIC STATEMENT(S) FOR CLIMATE IMPACTS

In Portugal, Planta Planteiga has 70% less climate impact than dairy butter.
In Portugal, Planta Planteiga has at least 50% less climate impact than dairy butter

SPECIFIC STATEMENT FOR LAND OCCUPATION

In Portugal, Planta Planteiga occupies 68% less land than dairy butter.

SPECIFIC STATEMENT FOR WATER CONSUMPTION

In Portugal, Planta Planteiga uses 75% less water than dairy butter.

EQUIVALENCIES PER KG OF PRODUCT

CLIMATE EQUIVALENCIES

In Portugal, switching from one kg of Dairy butter to Planta Planteiga could save at least 14.2 kg CO₂-eq, equivalent to:

- Driving a car 71 km. *Assumptions: Based on a medium-size petrol car (EURO5), considering tailpipe emissions only.*
- Charging a smartphone overnight for 64 months (1940 times). *Assumptions: Based on the electricity consumption of charging a smartphone overnight (19.2 Wh/day), assuming the regional electricity mix (EU)*
- Leaving a LED light on for 4140 hours (172 days). *Assumptions: Based on a 9-Watt LED lightbulb, assuming the regional electricity mix (EU)*

LAND OCCUPATION EQUIVALENCIES

In Portugal, switching from one kg of Dairy butter to Planta Planteiga could save at least 14.1 square meter, equivalent to:

- 3.5 table tennis / ping pong tables. *Assumptions: Based on the area of a standard table tennis / ping pong table (4.18 m²).*
- 227 sheets of A4 paper. *Assumptions: Based on a letter size (A4) piece of paper of 623.7 cm², excluding the land occupation associated with paper production.*

WATER CONSUMPTION EQUIVALENCIES

In Portugal, switching from one kg of Dairy butter to Planta Planteiga could save at least 135.1 liters, equivalent to:

- Leaving the tap running for 11 minutes. *Assumptions: Based on a tap water flow of 12 litres per minute.*

EQUIVALENCIES PER HOUSEHOLD OVER ONE YEAR

Based on a household of 4 with an average dairy butter consumption of 4.3 kg per person per year¹

¹Source: <https://www.statista.com/statistics/415230/butter-per-capita-consumption-europe-eu/#:~:text=Butter%20per%20capita%20consumption%20in,EU%2D27%202011%2D2021&text=This%20statistic%20presents%20the%20per,capita%20in%20the%20European%20Union.>

CLIMATE EQUIVALENCIES

In Portugal, if an average household of 4 people switched from dairy butter to Planta Planteiga for a year, it could save at least 245 kg CO₂-eq, equivalent to:

- Driving a car 1218 km.

Assumptions: Based on a medium-size petrol car (EURO5), considering tailpipe emissions only (201 g CO₂eq/km).

- Traveling 672 km by plane.

Assumptions: Based on a short-haul economy flight (364 g CO₂eq/km), based on My climate tool²
https://co2.myclimate.org/en/flight_calculators/new

- The electricity consumption of 1001 washing machine cycles.

Assumptions: Based on a washing machine cycle of 0.64 kWh/cycle (temperature 40°C, 50 litres of water use), assuming the regional electricity mix (EU)³

³*Source:*

https://ec.europa.eu/environment/eusdd/smgp/documents/2019_09_16_AISE_PFCR_Detergents_v1.2.pdf

- The electricity consumption of putting on an electric kettle 5126 times.

Assumptions: Based on a kettle consuming 0.125 kWh to boil 1 litre of water, assuming the regional electricity mix (EU)

LAND OCCUPATION EQUIVALENCIES

In Portugal, if an average household of 4 people switched from dairy butter to Planta Planteiga for a year, it could save at least 243 square meters, equivalent to:

- 14 parking spots.

Assumptions: Based on a 17.7 square meter parking spot.

- 0.9 tennis courts.

Assumptions: Based on a standard size tennis court of 260 square meters.

WATER CONSUMPTION EQUIVALENCIES

In Portugal, if an average household of 4 people switched from dairy butter to Planta Planteiga for a year, it could save at least 2324 litres of water, equivalent to:

- Leaving the tap running for 194 minutes.

Assumptions: Based on a tap water flow of 12 litres per minute.

- Taking 36 showers.

Assumptions: Based on one shower using 65 litres.

- 46 washing machine cycles.

Assumptions: Based on 50 litres of water use per washing machine cycle.

- Filling up 13 bathtubs.

Assumptions: Based on bathtub capacity of 180 litres.