2026

All in One NTT Business WA 900W Product Carbon Footprint

Prepared by Plan Be Eco

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Methodology

How do we calculate the carbon footprint?

Product Carbon Footprint Methodology

The product carbon footprint (PCF) assessment was conducted in accordance with the GHG Protocol Product Life Cycle Accounting and Reporting Standard and aligned with the principles of ISO 14067. The objective was to quantify the total greenhouse gas (GHG) emissions associated with a plastic packaging product across selected life cycle stages.

The following stages were included in the assessment:

- Material acquisition (raw material extraction and processing),
- Production processes (on-site manufacturing activities),
- Transportation (logistics from suppliers to the production site and/or to customers),
- Utilization phase (typical use by end users, where relevant).

Emissions were calculated in terms of carbon dioxide equivalents (CO_2e), covering all relevant GHGs as defined by the GHG Protocol. The analysis was based on a combination of primary data (e.g., material inputs, energy consumption) and secondary data for background processes, including emission factors from reputable databases such as

- UK Government GHG Conversion Factors for Company Reporting 2024
- Aerospace Industry Tool for Calculating Scope 3 Greenhouse Gas Emissions of Purchased Goods & Services and Capital Goods
- BEIS
- Circular Ecology
- Exiobase

This PCF enables identification of emission hotspots along the value chain and supports informed decision-making for emission reduction and product optimization.

Uncertainty Statement

This PCF assessment relies on a combination of primary activity data and secondary emission factors from established databases. Uncertainty arises from the following sources:

- Emission factors: Secondary data from databases (UK GHG Conversion Factors 2024, Exiobase, Circular Ecology) carry inherent variability and may not precisely reflect site-specific conditions.
- Use phase: Electricity consumption is based on declared annual energy demand (77,20 kWh/year) and a minimum product lifespan of 4 years. Actual use patterns may vary by end-user.
- Material acquisition: Spend-based estimation methods for electronic components introduce higher uncertainty than primary supplier data; this category represents the single largest source of modelling uncertainty.

The overall results are considered indicative of the product's relative emission profile. Replacing spend-based estimates with primary supplier data in future assessments would materially reduce uncertainty for the dominant emission category.

Basic information:

Parameter	Value
Product Weight	7,35 kg
Minimum Product Lifespan	4 years
Location (Energy Grid)	Poland
Annual Energy Demand (TEC)	77,20 kWh / year
Global Warming Potential (GWP100)	805,67 kg CO_2e / pcs

Carbon footprint results

This report was prepared in accordance with the life cycle assessment (LCA) methodology for the productAll in One NTT Business WA 900W as of July 2, 2026

Carbon footprint

The carbon footprint of one piece of All in One NTT Business WA 900W is 805,67 kg co2e

805,67 kg CO_2e

Phase	kg CO_2e / 1 pcs
Material acquisition	516,30
Transport upstream	3,89
Production processes	29,17
Transport downstream	0,0948
Use phase	256,15
Utilization phase	0,06

Table 1. Distribution of Product Carbon Dioxide Equivalent Emissions Across LCA Phases

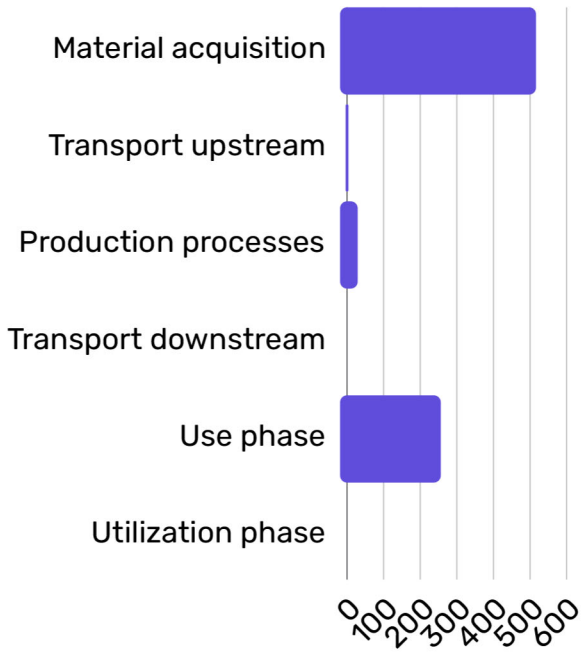

Chart 1. Distribution of Product Carbon Dioxide Equivalent Emissions Across LCA Phases

Analysis of Results:

Hotspot Analysis

Material acquisition (516.30 kg CO_2e, 64.1%) is the dominant contributor. This category reflects the emission intensity of global electronic component supply chains, which form the material core of the device.

Use phase (256.15 kg CO_2e, 31.8%) captures electricity consumption over the operational lifetime. Results are sensitive to the carbon intensity of the end-user's electricity grid — in coal-heavy markets, use-phase emissions will be materially higher.

Production processes contribute 3.6% (29.17 kg CO_2e). Transport (upstream + downstream) and the end-of-life phase together represent less than 0.5% of the footprint and are not material hotspots.

Summary and Conclusions

The life cycle carbon footprint of All in One NTT Business WA 900W is 805.66 kg CO_2e per unit (ISO 14040/14044, cradle-to-grave).

Two hotspots drive the result: material acquisition (64.1%), dominated by electronic sub-components, and the use phase (31.8%), driven by operational electricity consumption. Together they account for nearly 96% of total emissions.

Key reduction opportunities:

- Energy efficiency — reducing device power consumption directly lowers use-phase emissions, particularly in carbon-intensive grid markets
- Supply chain data — replacing spend-based estimates with primary supplier data would reduce uncertainty for the largest emission category while opening a path to targeted reductions
- Recycled materials — given the disproportionate contribution of electronic components, prioritizing secondary materials (copper, metals) offers a targeted reduction lever

Summary

This report was prepared in accordance with the life cycle assessment (LCA) methodology for the product All in One NTT Business WA 900W as of July 2, 2026

The carbon footprint of one piece of All in One NTT Business WA 900W is 805,67 kg co2e

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