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Cisco Desk Phone 9871

Life Cycle Assessment Summary: DP-9871

Goal and Scope

This summary presents the GHG emissions associated with the production, transport, use phase and end-of-life (EOL) of Cisco's DP-9871 Desk Phone. It is based on the *Life Cycle Assessment Report: Cisco Desk Phone 9871*, which is in alignment with the International Organization for Standardization (ISO) Standards 14040 and 14044 on LCA (ISO, 2006) and can be found in the Environmental Sustainability section of cisco.com. The underlying report and this summary have not been critically reviewed and are therefore not ISO-conformant.

Table 1: DP-9871 Technical Specifications

Technical Data	DP-9871
Product weight	2.33 lb (1.05 kilograms)
Annual Typical Energy Consumption	20.33 kWh
Dimensions (H * W * D)	8.89 * 8.43 * 1.94 in. (225.8 *214 *49.4 mm)

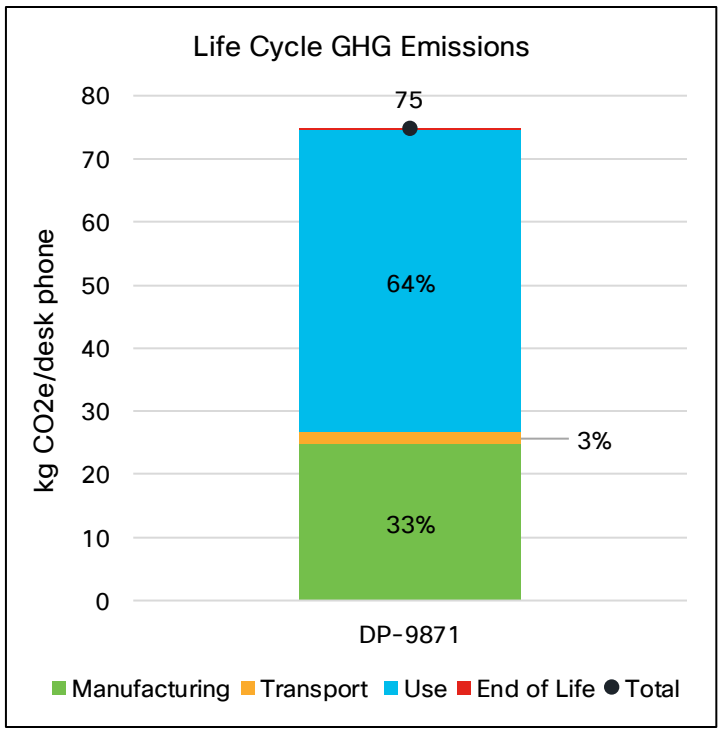
System Boundary

The model's system boundary was from cradle-to-grave for the life cycle inventory (LCI) and impact assessment and included raw material extraction and refinement, material transport, component manufacturing, assembly, testing, delivery, use phase and EOL. The product is disposed of at its EOL assuming a 5 year lifespan.

The study assumes most electronics production occurs in Asia and all material inputs were matched to datasets that are either global averages or Chinese datasets. Manufacturing was modeled specifically for China as the manufacturing country in terms of energy consumption. The use phase was assumed to take place in the United States and EOL was assumed as a global average.

Results

The GHG emissions (according to IPCC AR6 GWP 100, excluding biogenic carbon) per DP-9871 desk phone were 75 kg CO2e. The GHG emissions were categorized into different life cycle stages covering manufacturing, transport, use phase and EOL. The use phase significantly influences the overall impact, contributing 64 percent of the total for the DP-9871. The manufacturing phase was the second-largest contributor to GHG emissions, accounting for 33 percent of total GHG emissions per desk phone. Key electrical components (ICs and PCBs) are the most significant impact drivers, contributing 57 percent of GHG emissions in the manufacturing phase. The second major contributor is the display within the electro-mechanical components category, which accounts for 21 percent of the total impact in this phase.



Life Cycle Phase	GHG Emissions (kg CO2e)
Manufacturing	25
Transport	2
Use	48
End of Life	0
Total	75

Note: Figures may not total 100 percent due to rounding of underlying data.

Limitations

There are a few key data limitations associated with electrical components and the use of secondary data for assembly and testing. Within the BOM, electrical components were matched to the components available in the LCA for Experts (formerly GaBi) and ecoinvent databases, which were not always an exact match. Proxied components were scaled by length and width or mass to reflect the number and type of components in the product under study.

Manufacturing burdens of the assembly and testing of the product were proxied using secondary datasets from ecoinvent. A limitation of the proxies is that they do not track operation improvements or changes over time.

Disclaimer: Data and other information in this report are estimates and indicative only, based on assumptions and approximations, for particular products and points in time. They are neither predictions, commitments or guarantees of actual outcomes nor intended for purposes other than identifying opportunities to improve the environmental performance of products at various points in their life cycle. Cisco and WSP continue to refine the methodology, modelling, and assumptions. Data and other information are therefore subject to change and uncertainties that are difficult to predict.

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Further information on Cisco's approach to Life Cycle Assessments (LCAs) is available at Cisco's Environmental, Social, and Governance (ESG) Reporting Hub, at https://www.cisco.com/c/m/en_us/about/csr/esg-hub.html