Product Carbon Footprint Report

HP Pro Tower 290 G9 Desktop PC ENERGY STAR
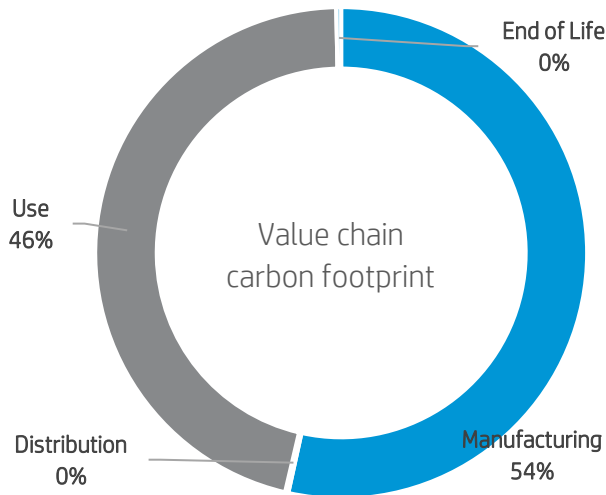
Estimated impact

746 kg CO$_2$ eq.

As part of HP's commitment to continually improve the environmental performance of our products, we utilize product carbon footprinting (PCF) to better understand environmental impacts that occur at different stages of the product life cycle. A product carbon footprint is defined as the total amount of greenhouse gases emitted directly and indirectly by a product over its lifetime. Our product carbon footprints include full value chain emissions, which incorporates carbon emissions due to raw materials extraction, manufacturing, distribution, use, and product end-of-use.

The information provided here represents the lifecycle carbon footprint of an industry-average desktop computer with the specifications listed in Assumptions table.

GHG Emissions

End of Life 0%
Use 46%
Distribution 0%
Manufacturing 54%

Value chain carbon footprint

Manufacturing Breakout

Mainboard and other boards	56.1%
Solid State Drive (SSD)	28.4%
Chassis	4.1%
Power Supply Unit & External Cables	3.9%
Hard Drive (HDD)	3.9%
Others*	2.0%
External components (Keyboard & Mouse)	0.9%
Packaging	0.6%

HP's environmental impact calculations are done in accordance with ISO 14040/44. All estimates of impact results are uncertain, resulting largely from data limitations and data quality. To mitigate this uncertainty, HP has developed HP-specific tools that use a combination of HP processes and product data, as well as high-quality lifecycle assessment data. HP strives to provide the most accurate environmental impact results but uncertainty will never be completely minimized and results should be considered accordingly.

Assumptions

Lifetime of product (years)	5
Use location	North America
Use energy demand (kWh/year)	128.31
Product weight (kg)	6.4
Final manufacturing location	China

Additional product environmental performance

Additional information about HP's carbon footprinting program can be found in HP's yearly Sustainability Report, which is available on the HP Sustainability website.
The site also contains IT Eco Declarations, which provide product-specific environmental information, as well as information on HP's product recycling programs.

* Others section includes assembly energy, other subassemblies and all subassemblies packaging and transport

Learn more at

HP's Sustainability Website