NetApp

EF600 PRODUCT CARBON FOOTPRINT REPORT

Intelligent Data Infrastructure is Sustainable Data Infrastructure. Sustainability starts with data, and NetApp provides customers with energy efficient and resilient solutions for their data infrastructures.

NetApp® EF600 all-flash NVMe systems deliver extreme performance and efficiency for high-performance workloads. The EF600 storage system features a compact 2U design with end-to-end NVMe architecture, providing industry-leading performance, ultra-low latency, and enterprise reliability for mission-critical applications. With advanced data protection and simplified management through SANtricity System Manager, EF600 is purpose-built to accelerate data-driven insights and demanding operations. Support for SAS expansion shelves is ideal for tiering workloads.

Data centers are significant consumers of electricity and contribute to global greenhouse gas emissions. NetApp provides lifetime carbon footprint estimates for its storage solutions to help customers understand the environmental impacts of these systems.

NetApp uses the Product Attribute to Impact Algorithm (PAIA) to calculate the carbon emissions associated with a product through its lifecycle, encompassing raw material acquisition, manufacturing, distribution, product use, and final disposition. PAIA is a streamlined product carbon footprint methodology developed by the Materials Systems Laboratory at the Massachusetts Institute of Technology (MIT) and is recognized globally for assessing the environmental impacts associated with the entire lifecycle of a product.

PAIA PCF analysis estimates are not intended for comparing products from different suppliers. For more information about PAIA, see this underline.

Estimated lifetime carbon footprint for EF600 systems:
15,996 kg CO_2e[1]

The majority of a product's lifetime carbon footprint is from its use. "Other" includes activities from upstream manufacturing/supply chain and downstream end of life.

88.1%
Usage

11.9%
Other

All results in mean kg CO_2 equivalent

462.2 (2.89%)	Enclosure
314.2 (1.96%)	Solid State Drive(s)
279.9 (1.75%)	Memory (DRAM)
233.1 (1.46%)	Mainboard
194.8 (1.22%)	Daughter-board(s)
173.1 (1.08%)	Transport
77.1 (0.48%)	Fan(s)
50.6 (0.32%)	Midplane
46.1 (0.29%)	Power Supply Unit(s)
31.8 (0.20%)	End of Life
20.4 (0.13%)	Housing
14.6 (0.09%)	Packaging
4.8 (0.03%)	Assembly, cables

Assumptions used in this analysis are shown below.[2]

Use location[3]
EU

Country of origin
Hungary

Usage life
4 years

Memory (HA)
64GB

CPU cores (per controller)
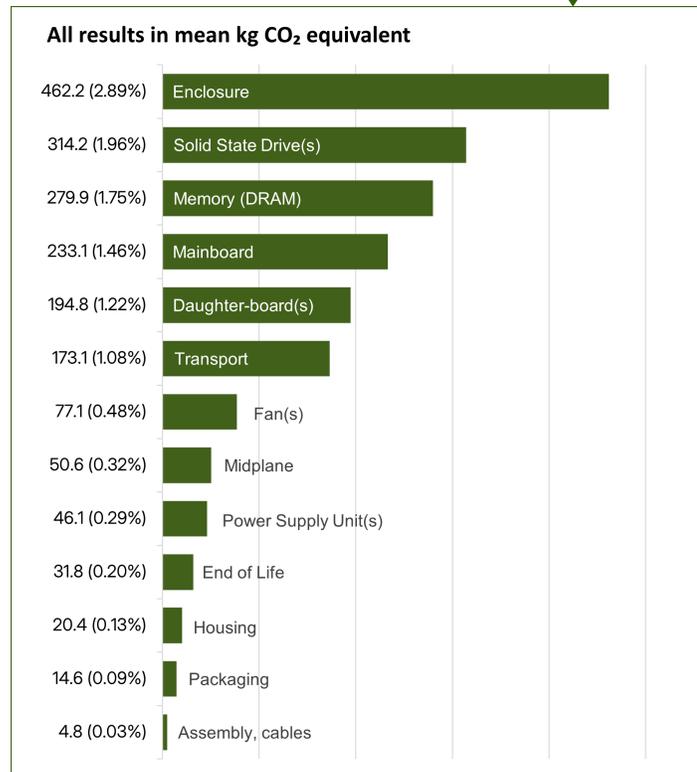12

SSD count
24

Weight
27.4 kg

Transportation
1,500 km/air
600 km/truck

Total energy consumption[4]
7,079 kWh/year

Footnotes

1 All estimates of environmental impact and/or carbon footprint are uncertain. PAIA analyses provide reasonable estimates of the carbon impact of products, along with a range of uncertainty of the results. Standard deviation for this analysis is +/- 9,379 kg CO_2e.

2 This analysis used PAIA version 1.5.2. Future results could change as the tool is updated.

3 Use location for this PAIA analysis is EU; actual emissions calculations are dependent on where the equipment is used (specific state/country).

4 Total energy consumption is estimated based on the typical power rate. The EF600 field population used in our power consumption analysis focus on the most common configuration used by customers. Various configuration options will have different power consumption rates reflected in the usage phase data. Concise power consumption and environmental analysis of your EF600 storage systems are available in the NetApp Console Sustainability Dashboard, which uses telemetry from your system in its analysis. Learn about our sustainability initiatives here.