

About Pure Storage

Pure Storage is a global leader in data storage and management with a mission to redefine the storage experience by simplifying how people consume and interact with data, all while positively impacting customers, partners, employees, communities and the environment.

Introduction

Understanding and managing the carbon footprint of products has become a crucial aspect for businesses committed to environmental sustainability. This report presents an analysis of the carbon footprint of the Pure Storage® FlashArray™ Family of products.

Pure Storage products are designed with environmental consciousness at its core, intended to offer high performance and reliability, while helping reduce the environmental impact of IT operations. As part of our commitment to transparency and sustainable development, we have used life cycle analysis to quantify the greenhouse gas (GHG) emissions associated with the entire lifecycle of our products.

Our assessment adheres to the guidelines of the International Organization for Standardization (ISO), specifically ISO 14040, Through this report, we aim to identify the key stages in the lifecycle of FlashArray systems that contribute most significantly to their carbon footprint, thereby uncovering opportunities for further environmental improvements and emissions reduction.

Our Technology

At Pure Storage, we offer a unified platform that is far more sustainable than any other available enterprise data storage technology, including other all-flash storage. Compared to competing solutions, our products use up to 85% less power and space, significantly reduce e-waste, and deliver superior reliability, for more sustainable operations.

Pure Storage Is Committed to...



Being net zero by 2040, covering our Scope 1 and market-based Scope 2 emissions



Setting science based targets (SBTi), covering Scope 1, 2, and 3



Reducing use of sold product emissions per effective petabyte by 66% by 2030, against a FY20 baseline

PRODUCT CARBON FOOTPRINT REPORT ASSUMPTIONS

Use Location	EMEA
Assembly Origin	Pardubice, Czech Republic
Total Lifecycle	10 years
Rack Space	3 RU (//X, //C, //E), 5 RU (//XL)
Media Count	20 DFM (//X, //C, //E), 40 DFM (//XL)
Weight	50 kg (//X, //C, //E), 85 kg (//XL)
Total Energy Consumption	Varies by model. See details on next page.
Transportation	1000 km, Ground

FlashArray Product Family

Estimated Lifetime Carbon Footprint¹

FlashArray//X™	//X20	//X50	//X70	//X90
Product Carbon Footprint—Manufacturing	3,875 kg CO2e	3,910 kg CO2e	3,910 kg CO2e	4,015 kg CO2e
Annual Energy Consumption—Product Use ²	11,720 kWh	12,613 kWh	13,252 kWh	14,778 kWh

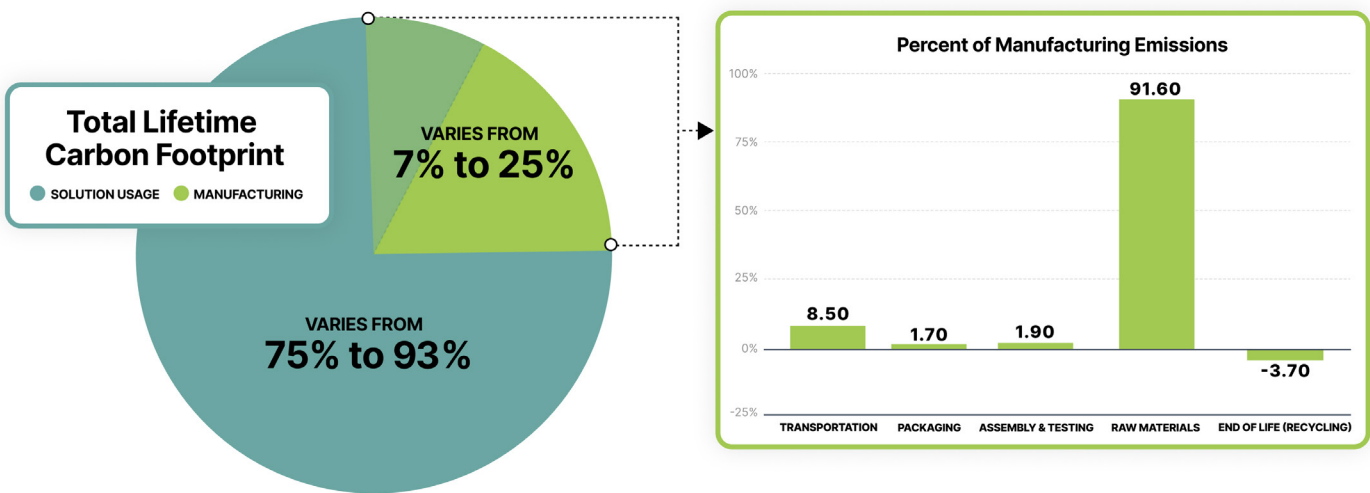
FlashArray//C™	//C50	//X70	//X90
Product Carbon Footprint—Manufacturing	3,910 kg CO2e	3,910 kg CO2e	4,015 kg CO2e
Annual Energy Consumption—Product Use ²	12,613 kWh	13,252 kWh	14,778 kWh

FlashArray//XL™	//XL130	//XL170
Product Carbon Footprint—Manufacturing	6,109 kg CO2e	6,109 kg CO2e
Annual Energy Consumption—Product Use ²	17,695 kWh	21,374 kWh

FlashArray//E™	//E (2 PBE)
Product Carbon Footprint—Manufacturing	3,875 kg CO2e
Annual Energy Consumption—Product Use ²	12,613 kWh

FlashArray Solution Use and Manufacturing Emissions³

CO₂ emissions due to solution use vary from 75% to 93% of the products' carbon footprint depending on the install country. The remaining portion of CO₂ emissions is due to manufacturing activities which make up 7% to 25%. The percent of manufacturing emissions due to specific activities are shown in the graph on the right.



¹ Values shown apply to FlashArray chassis-only models. Product Carbon Footprint calculations for the non-use phase (manufacturing) are based on ISO 14040 Life Cycle Assessment (LCA) of FlashArray//X. Use phase emissions calculations will vary by install location. For more detailed analysis of your Pure Storage systems, visit <https://pure1.purestorage.com> and click on Assessment > Sustainability. ² Includes cooling energy assuming a data center PUE of 1.4. Annual product use CO₂ emissions for each FlashArray model can be determined by multiplying annual energy consumption by the localized CO₂ intensity of electricity per kWh (varies by geographic region). The total lifecycle emissions from product use is, therefore, 10 years x annual emissions. ³ Individual product use emissions will vary by geographic region. Transportation % reflects shipping during manufacturing processes only. Assuming an average of 1000 km of ground shipping to customers adds approximately 15 kg CO₂e of additional emissions per product.