Sustainable Science

Speed life sciences research and reduce energy consumption.



SUSTAINABLE SCIENCE

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Net Zero by 2050?

Get There Faster with Pure Storage

Today, the healthcare industry generates approximately 30% of the world's data. By 2025 the compound annual growth rate of healthcare data is expected to reach 36%.¹ This critical data supports scientific and medical breakthroughs, improving overall health worldwide. Yet, collecting, storing, and analyzing so much data—which is often unstructured and complex—comes at an economic and environmental cost.

At Pure Storage[®], we believe that building sustainable technology infrastructure is necessary to reach net zero by 2050² and help mitigate the consequences of climate change. We also believe you shouldn't have to compromise when it comes to finding technology that meets all your goals.

Making changes in pursuit of climate goals is challenging. Whether you're already seeing progress or in the earlier stages of planning, there is a lot to consider. And there is no pause button.

However, rethinking your data storage is a straightforward step that can have a significant impact on your organization's energy consumption—and lower energy costs.

To achieve the Paris Agreement goal of keeping the global temperature increase to 1.5 degrees, global greenhouse gas emissions will need to decline by **43% by 2030** and to net zero by **2050.**²



Start with Your Data Center

Data centers use 1% of the world's energy. And data center energy consumption is predicted to double this decade.³ That's no surprise considering genomics sequencing and the growing use of artificial intelligence (AI) create a deluge of data.

The typical laboratory consumes 10 times the energy—with many sources of energy emitting carbon emissions—and four times the water of a typical office space. But a lab isn't a typical office space. You can't simply turn off machines or ask your whole team to go remote. Reducing your energy footprint has to be built into the technology you use most.

We can't put the brakes on data growth, but we can reduce the amount of energy we use to store that data.

Customers who choose Pure Storage regularly cite energy savings as contributing to their decision because we design our products to be efficient, accommodate growth, and take up less space.





With Pure Storage FlashArray[™], **Pederzoli Group** now has 247TB of available space in each rack—enough capacity to support growing data demands for years to come. High image compression and deduplication reduced the number of units in the data center by more than 75%.

Read the Full Story

Pederzoli Hospital Experiences Higher Performance, Less Consumption "We have saved a lot of space—a critical resource in all hospital facilities—and energy, which is an important sustainability goal for any organization."

FRANCESCO CORBA COLOMBO, IT INFRASTRUCTURE MANAGER, PEDERZOLI HOSPITAL



Check Reducing Energy Consumption and Costs off Your To-do List

As your data grows, so do your storage needs. All-flash storage from Pure Storage is designed to help you become more energy and cost-efficient without compromising on performance. Always-on Purity data reduction software enhances storage efficiency, reducing effective energy usage without compromising performance. Pure Storage DirectFlash® technology delivers unparalleled density and efficiency from flash, driving significant energy reductions and delivering longer service lifetimes and three times more reliability than the industry average. And our unique Evergreen® architecture means that our products are in it for the long haul. Modular design allows you to update components as needed, rather than making expensive, wholesale replacements that traditional systems may require.

With Pure Storage:



Experience 85% less energy consumption and greenhouse gas emissions than competitors



Use 96% less rack space than hybrid disk storage

Increase storage density by 1,000% with fewer units per rack





BY AN AVERAGE PASSENGER VEHICLE GALLONS OF GASOLINE

Equivalent CO, Savings per Array

5,938

22,466 LITERS



i

873

GROWN FOR 10 YEARS



84.7%

SAVINGS IN CO₂ PER YEAR





McMaster University's McArthur Lab turned to FlashBlade® as the underlying infrastructure for its highperformance computing workloads to power new gene sequencing systems to accelerate drug discovery.

Read the Full Story

McArthur Lab Processes Terabytes of Data with a Smaller Footprint "FlashBlade provides large, rapid, and nimble data storage capacity that can scale as gene sequencing technology advances. It's twice as fast at one-third of the cost."

ANDREW MCARTHUR, PH.D., GENOMICS PROFESSOR AND RESEARCHER, CANADA'S MCMASTER UNIVERSITY



Pure Storage Is Sustainable Inside and Out

Sustainability is integral to our business. We design our core technologies to last longer and use less energy, which supports our customers' goals. But we are continually improving our internal operations to see the impact of this work stretch even further. With Pure Storage, you don't have to choose between reducing your carbon footprint and controlling costs. Our products are designed with both environmental and financial sustainability in mind.

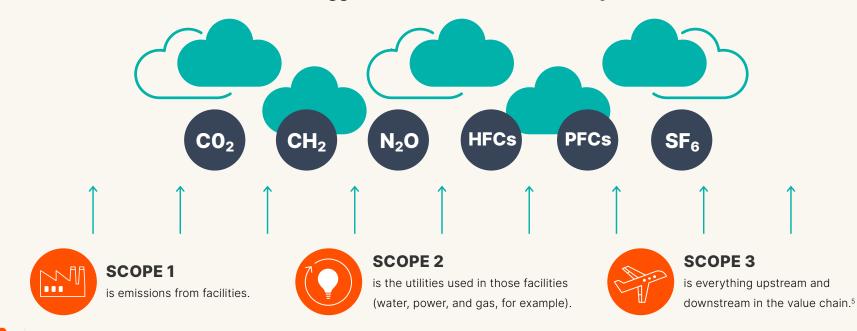
Pure Storage is committed to:

Reducing emissions from our facilities and associated utilities by 50%

Reducing emissions from everything upstream and downstream in the value chain by 66%

Achieving net zero market-based Scope 1 and 2 emissions by 2040⁴

The Bigger Picture of Carbon Neutrality



Welcome FlashBlade//E to Our Sustainable Family

The newest member of the FlashBlade family offers an affordable, all-flash storage solution for unstructured data repository workloads.

Organizations could see their unstructured data capacity grow by 10 times before 2030. Managing those workloads on disk-based solutions is unsustainable in more ways than one. Disk-based systems require complex maintenance, massive amounts of power and space, and their components fail too often, putting data at risk. Although modern file and object storage solutions can address many of these challenges, they haven't been a viable option for large, unstructured data repositories that are price sensitive.

FlashBlade//E[™] is here to change that.



FlashBlade//E Has Better Economics Than Disk



CONSUMES





LOWERS OPERATIONAL COSTS BY





GENERATES 85% LESS E-WASTE



OX-20X

Say Hello to FlashBlade//E



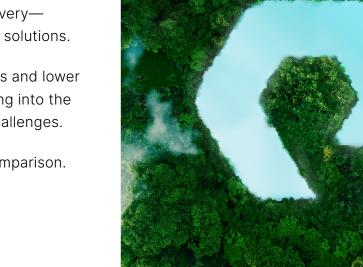
Working towards Carbon Neutrality Together

The medical innovations of tomorrow are driven by the big data analysis of today. Accelerate your research—and your time to discovery without deepening your carbon footprint with Pure Storage solutions.

We build the technology to help you elevate your operations and lower your costs so that you can keep doing what you do best long into the future: addressing life sciences and healthcare's biggest challenges.

Contact Pure Storage for a personalized energy savings comparison.

purestorage.com/schedule-a-meeting



- 1 The healthcare data explosion. RBC Capital Markets
- 2 UN Sustainable Development Goals. United Nations.
- 3 Emerging Technologies: Enterprise Storage Will Consume More of the Available Data Center Power Budget and Undermine Sustainability. Gartner, December 2021.
- 4 2021 ESG Report: Technology and Sustainability. Pure Storage.
- 5 Corporate Value Chain. Accounting and Reporting Standard, November 2022, Greenhouse Gas Protocol.

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