

# Sustainability in a World of Data Growth

Savas Nicolaides Lead Principal Technologist @ Pure Storage

#### **Pure Storage At A Glance**



Leadership

**9** Years Leader

Gartner Magic Quadrant



Pure Product Portfolio(1)

Up to 80%

Customer Energy Savings



Customers

11,000+\*

**Global Customers** 



Satisfaction

81.4 NPS(2)

Highest in the Industry



ServiceNow modernizes its data center with Pure Storage to keep up with a growing customer base and data volumes, becoming the first major cloud provider to move to an all-flash data center.



Meta builds one of the world's fastest Al supercomputers, using Pure Storage FlashArray and FlashBlade to deliver petabytes of data to train Al models.



Pure Storage underpins the Mercedes F1 team both at and off the track. They can run more simulations in the finite time as regulated by the FIA, so gain a competitive advantage.



NASA uses Pure Storage as part of a digital transformation aimed at driving innovations that keep NASA on the forefront of discovery and exploration.











#### **Electricity Price**









### What is the role of IT in sustainability?

The survey showed that:

The problem will deepen as



of sustainability program managers feel that companies cannot reach their goal without reducing the energy usage of IT predict the impact of IT on a company's carbon footprint will increase in the next 12 months

**Population:** 1,000 Sustainability Program Managers with a minimum seniority of Director in U.S. (400), U.K. (200), France (200), and Germany (200) - between October 25 and November 3, 2022.

# CLOUD-LIKE BEHAVIOUR

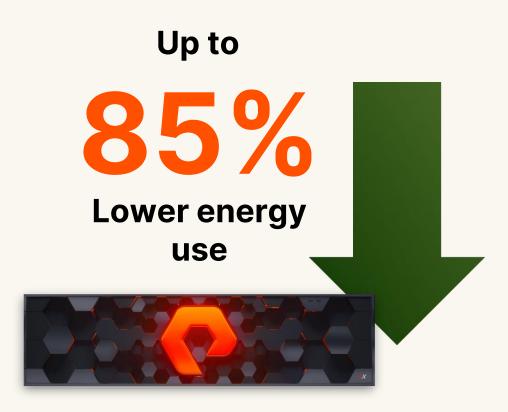
- Buy what you need
- Use what you've got
- Pay for what you use



# More Sustainable Storage Technology

#### **Making Storage Energy Efficient**

- Pure enables organizations to lower energy usage in their data storage systems
- Pure FlashArray™ lowers energy used up to 85% compared to competitive all-flash systems—and even more against magnetic disk
- Virgin Media O<sub>2</sub>
  - O moved its data to Pure Storage FlashArray platforms
  - O Reduced its storage racks from 42 to just three, providing a 96% power reduction and avoiding the need for a new datacenter



# NHS PACS

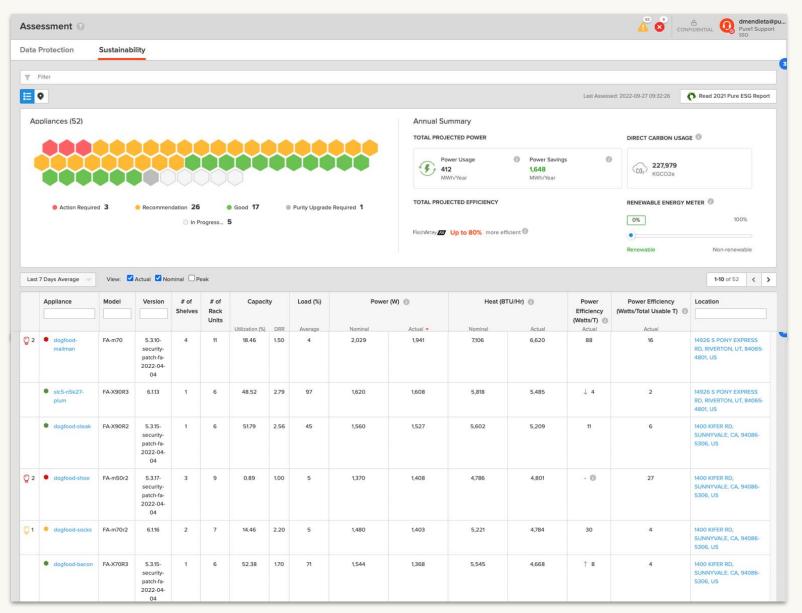
Rack Space - 3U vs 36U
Power cooling savings > 90%





# SUSTAINABILITY ASSESSMENT

- Reporting actual device power consumption and thermal output
- Power efficiency in Watts/TiB
- Recommendations on optimization of fleet
- Subscription Efficiency SLA





### **Evergreen: It Starts With the Architecture**

#### Uncomplicate data storage







Deploy Once, Upgrade In Place



No Planned Downtime



No Data Migration



Full Performance, Non-Stop



Modernize Hardware and Software



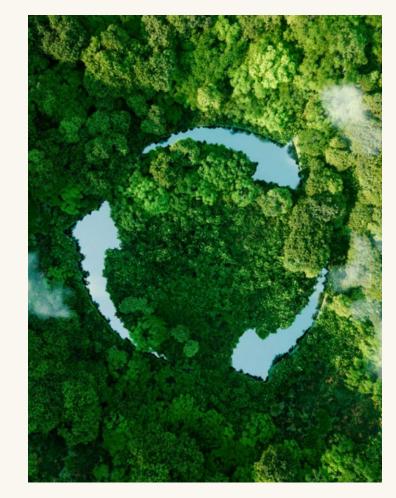
Multi-Generational Lifespan



**Investments Protected** 

#### **Reduction of E-waste**

- Pure's unique Evergreen architecture means that our products, unlike legacy storage, never go obsolete or need replacement
- Storage arrays are upgraded modularly and non-disruptively, lasting 10+ years
- Customers continuously benefit from the latest hardware and software technology
- This reduces unnecessary product replacement and associated e-waste



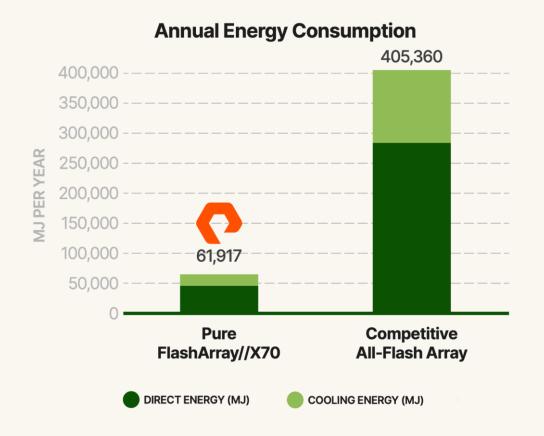
# Pure's FlashArray//X70 Energy Savings

#### **Sources of savings**

- Drive Density Advantages: DirectFlash technology provides higher efficiency
- Data Reduction Advantages: Always-on data reduction provides storage efficiency and reduced energy use
- System level efficiency: Built-for-flash software and architectural simplicity require less compute overhead
- Outcomes: lower energy use, higher array utilization, reduced datacenter footprint and lower costs

Up to 85% lower energy use

#### FlashArray//X70 Competitive Comparison





#### A Different Approach to Flash Technology



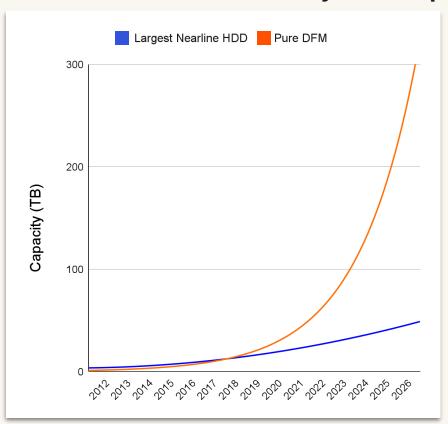
# SOFTWARE-DEFINED FLASH



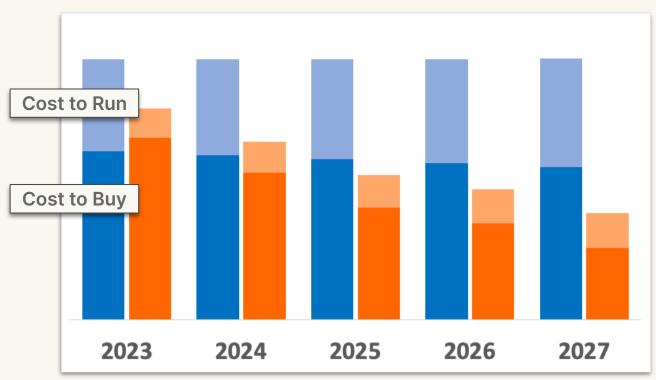
Hardware + software co-design for maximum efficiency

#### What does the future look like?

#### Flash Module vs. Disk Density Roadmap



#### **Annualized TCO**











#### Purpose-built for Sustainable IT

Since our founding, Pure has built sustainable, energy-efficient storage technology to help our customers reach their sustainability goals—even while they solve their storage challenges

# Want to learn more? purestorage.com/esg

