

# Elevate Your Data Storage Management

Securely manage your storage  
total cost of ownership.



# Navigating The Storage Lifecycle

## Contents

1. *Factory Recertified vs Refurbished*
2. *Maximizing Your Total Cost of Ownership*
3. *Get Money Back on Your Old Drives*
4. *Drive Time!*

As society kicks into AI overdrive, demand for data storage will only accelerate. Some analysts are predicting a near quadrupling in shipped exabytes by 2028. From sourcing the right drives to timing your refresh cycles, you need trusted support to stay ahead of your storage lifecycle management during this time.

# 1. Factory Recertified vs Refurbished

## Knowing the Difference

You may have wondered what exactly is the difference between factory recertified and refurbished drives — and why factory recertified drives typically make a good choice for your data center.

### OEM vs Third Party Testing

Factory recertified drives are drives that have been retested by the original equipment manufacturer (OEM) and certified as being in optimal condition.

By contrast, refurbished drives have usually been handled and tested by a third-party seller. These devices can vary considerably in quality.



*Factory recertified drives typically come with a label indicating that they've been officially recertified by the manufacturers.*

# Frequently Asked Questions

## What are the benefits of factory recertified drives vs refurbished?

The HDD manufacturers know the ins-and-outs of their drives better than third-party service providers. With FR drives, the OEMs retest and certify the drives themselves, in accordance with the [latest standards for sanitization](#), and with access to the most precise equipment. Recertification may include updating firmware, resetting [S.M.A.R.T stats](#), and running various tests.

## Are recertified drives as good as new?

Recertified drives are often not just good-as-new, but genuinely unused. Many drives will have near zero, if any, power-on hours (POH) and will test to new drive standards. Factory recertified drives are typically among the [lowest-failing drives](#) in the marketplace. They come factory packaged with a standard six-month warranty.

## How do you purchase factory recertified drives?

To ensure authentic, quality parts, FR drives are distributed by authorized suppliers, such as Horizon Technology.

## How common are factory recertified drives in the data center?

Factory recertified drives are more common than you might think. Many customers are already using factory recertified in their systems without realizing. When they send drives back to the manufacturer for warranty, most manufacturers are sending back factory recertified.

## What drives the market in factory recertified?

It's typical for firms to buy [drives in bulk](#), and then return any drives that aren't working properly or are unneeded. Plus, where a lot test exceeds acceptable threshold failure rates, batches of drives may be returned to the manufacturer. In this case, the entire lot is cycled through the OEM's recertification process.

# The Horizon Difference

*Leverage our long-term relationship with the HDD OEMs and benefit from our customer-centric approach around storage supply challenges.*

## Extended SLAs



Enjoy the benefit of extended storage SLAs with factory recertified drives, at or below their current cost.

## Stock Out Support



Fill stock outs and gaps (by part number or capacity) in your supply chain, with factory recertified drives.

## Global Reach



Get drives where you need them, with facilities in the United States, the Netherlands, Hong Kong, and Vietnam.

*Horizon offers the #1 Factory Recertified distributor program for both legacy and current product lines.*

## 2. Driving Down Your Total Cost of Ownership

### Get More Out of What You Own

Typically, the most effective way to lower TCO is to reduce your fixed and variable costs. But to lower these costs, you first need to make an upfront investment in new or replacement hardware.

So what happens when you're expecting to store more data, not less? Here, capacity upgrades come into play — replacing older yet still operational hardware with newer, higher capacity devices to achieve a lower cost per TB.

For example, upgrading from a 12TB drive purchased five years ago to a 22TB at today's pricing can yield a **36% reduction in cost per TB**, with an aggregate 600TB increase in available capacity.

	12TB HDD	22TB HDD	22TB FR
Server	\$10,000.00	\$10,000.00	\$10,000.00
JBOD	\$4,600.00	\$4,600.00	\$4,600.00
Switch	\$1,500.00	\$1,500.00	\$1,500.00
Storage	\$18,000.00*	\$24,000.00**	\$18,660.00**
Hardware Cost	\$34,100.00	\$40,100.00	\$34,760.00
Total Storage (TB)	720	1320	1320
Cost per TB	\$47.36	\$30.38	\$26.33

\* pricing based on October 2019 \*\*pricing based on July 2024

Investing in a factory recertified hard drive yields an additional 13% reduction in cost per TB, for an **overall reduction of 49%**. Plus, this upgrade maintains the same power draw, effectively halving electricity costs per TB.

# 3. Get Money Back on your Decommissioned Drives

## Recover Value, Don't Burn it Away

Investing in new or recertified drives as part of your storage lifecycle planning is one thing. But what to do with the drives you no longer need?

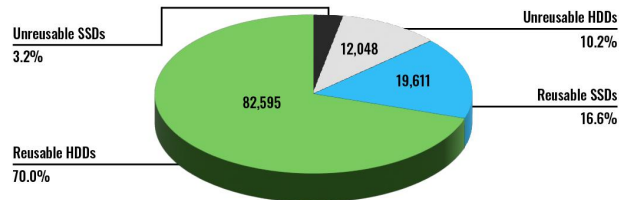
It's too easy to destroy end-of-use drives rather than reuse or resell them. But, in turning to the shredder or incinerator, we're burning money that could be returned to the IT budget.

A staggering **480 million of the 628 million drives** produced in 2020 will eventually be destroyed despite being fit for reuse, according to recent research.

*Annually, that's about **\$24 billion in missed economic opportunity** for enterprise buyers and sellers of drive storage. Now that's a chunk of change to take notice of.*

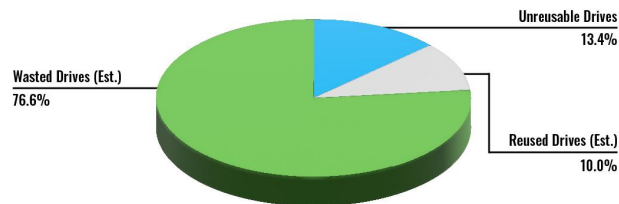
### DRIVE REUSABILITY AFTER ERASURE

Based on 117,982 drives.



### QUANTIFYING # OF DRIVES WASTED

Based on estimated reuse rate of 10%.



# The Horizon Difference

## Secure Reuse



*Our trusted secure remarketing programs offer:*

- Best-in-class data sanitization
- Workflows & rigorous logistics with system-level checks
- Secure chain of custody so you know where your product is at all times
- Repair and grading to maximize your returns

## Responsible Disposition



When reuse is not an option, Horizon is committed to the safe, secure disposal of data center hardware in strict compliance with all regulatory requirements.

## Certifications



The R2v3 standard is the internationally recognized certification for refurbishing and recycling electronic equipment.

Horizon builds custom plans through its proven IT remarketing programs in accordance with the latest CDI-approved sanitization guidelines. At all stages, we place the highest premium on the security of data on retiring devices.



# The Circular Drive Initiative

## Here's why Horizon Technology is a proud and active member of CDI

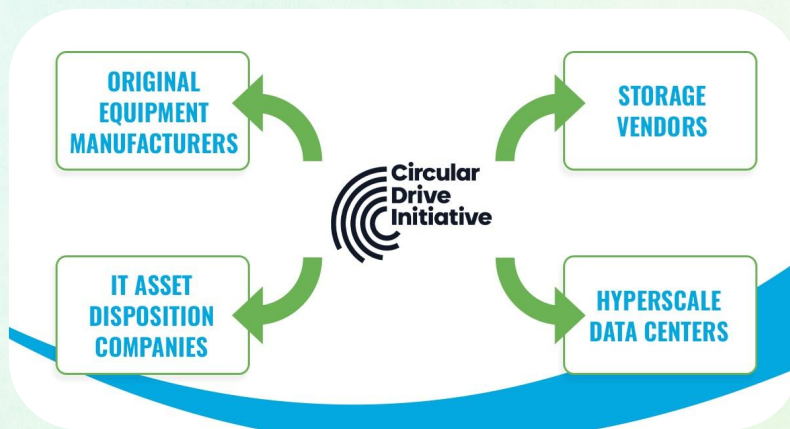
The Circular Drive Initiative believes that every functioning drive should have the chance of a second life!

CDI was convened in 2022 under the leadership of William McDonough, an architect renowned for his work on circular design and the development of the “cradle-to-cradle” principle.

The consortium brings together a dream team of industry leaders to formulate and implement sustainability strategies.

Members include prominent drive manufacturers like Seagate, memory leaders such as Micron, storage specialists like Horizon Technology, and eco-friendly blockchain groups such as the Chia Network.

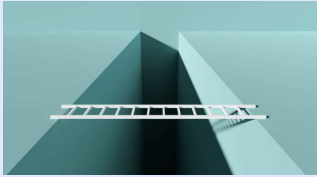
“CDI’s mission is to promote the reuse of drives by educating end users and creating de facto test and data sanitization standards. This helps remove any questions and concerns around the reuse of drives,” explains Stephen Buckler, chief operating officer of Horizon Technology.



# 4. Drive Time

## Stay up-to-date with the world of HDD

### Reuse It Or Lose It



Study reveals a massive gap between the number of enterprise HDDs and SSDs fit for reuse and those that actually go on to a second life.

[Read More](#)

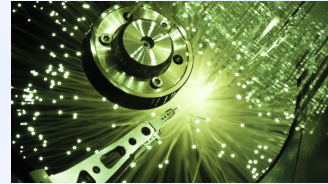
### Predicting HDD Failure



HDDs capture data about their own performance in the form of SMART attributes, an important gauge for monitoring HDD health.

[Read More](#)

### Recertified vs. Refurbished



Recertified hard drives are rigorously tested, and usually available at a discount. But making a quality purchase involves knowing what to look for.

[Read More](#)

### The Road to 50TB

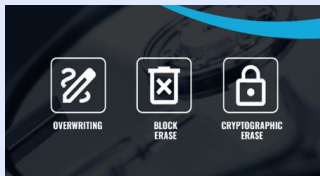


The big three HDD manufacturers are developing innovative tech that lets them pack in the terabytes: but who will be the first to make a 50 TB drive?

[Read More](#)

# More News & Views on HDD

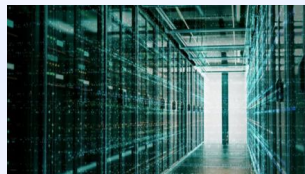
## Data Purging in IEEE 2883



The IEEE 2883 standards set out strict compliance criteria for securely sanitizing drives.

[Read More](#)

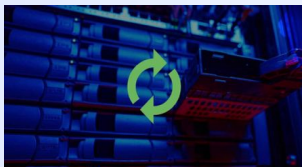
## The Impact of SMR Drives



After years of slow growth, HDD capacity is once again increasing rapidly — and shingled magnetic recording (SMR) is a critical part of this story.

[Read More](#)

## The Circular Drive Initiative



CDI is uniting storage industry leaders in a push to minimize environmental impact and promote secure reuse.

[Read More](#)

## Making Hard Drive Disposal Easy



Leading storage analyst, Tom Coughlin, turned to Horizon Technology's leading-edge data sanitization program for his own hard drive disposal.

[Read More](#)

# Elevate Your Storage

[sales@horizontechnology.com](mailto:sales@horizontechnology.com)

+1-(949) 595-8244

