

Reduce your data's carbon footprint.



Data growth is hurting the planet.

Data generation is growing exponentially. IDC predicts that global data creation and replication will experience a compound annual growth rate (CAGR) of 23% over the 2020-2025 forecast period. This doesn't sound like a bad thing until you consider the impact on our environment.



Data created globally in 2025

IDC

Needed for media archiving in 2025

Research and Markets

Global data from 2022 to 2026

IDC

More data means more data centers.

There are at least 8,000 large data centers in the world. Some sources state there are over 8 million data centers. In 2021, more than 100 data center projects were launched or were under construction in the US with 209 more worldwide. Over 90% of data center projects are developed by colocation service providers and hyperscale operators such as Facebook, Apple, Google, and Microsoft. Year over year growth for new data centers to be built is currently at 20.22%. This is great for the economy, but not so good for the environment. By 2025, data centers are expected to account for more than 3% of global carbon output.



The global multiplier.

Traditional cloud storage architectures copy and store data in multiple regional data centers for global availability, which puts a 2-6x multiplier on data growth.



How bad is it?

By 2040, IDC predicts storing digital data will create 14 percent of the world's emissions—around the same

proportion as all carbon the US emits today.



Aren't data centers working on this?

They are. Data centers have been working to minimize energy use and are switching to alternative energy sources. However, the most carbon intensive impact of data storage is arguably the manufacture of the hard drives (HDDs). Rare earth metals are mined, primarily in China, shipped to Japan to create magnets, shipped to Malaysia for actuator assembly, shipped to Thailand for drive assembly, then to their final destination.



Research from Tannu and Nair (2022) found the manufacture of 1 TB of HDD capacity results in a carbon footprint of about 20 kg.

Storj is green, performant, and saves you money.

Storj is a different kind of cloud storage that significantly reduces carbon emissions compared to cloud providers using centralized data centers. How? Storj created a distributed storage network that makes use of existing, unused hard drive capacity.

According to statistics from the NRDC and IBM, most servers operate at only 12-18% of capacity, implying that there is a huge reservoir of already manufactured and powered, but severely underutilized, storage capacity. Research from Yale University states that reuse of HDDs can save approximately 5 kg CO2 for every 6 months that a drive's life is extended.

Storj makes use of this available capacity by splitting up files and distributing them across tens of thousands of storage nodes in over 100 countries using end-to-end encryption. When a download request is made, Storj uses the



How Storj reduces carbon emissions.

- Storage capacity comes from existing hard drives
- Hard drive life can be extended for this purpose
- Data growth does not require new data centers to be built
- No additional replication for

segments from the fastest nodes to rebuild the file. This also means that files are accessible anywhere in the world without needing additional replication and storage in multiple regions.

Better for the planet—and your budget.

Ø

Reduce carbon emissions

Using excess capacity and reducing the need for copies shaves a zero off your carbon footprint.

\bigcirc

Incredible resiliency

Storage nodes are self healing resulting in 11 9's of durability and 99.95% availability—anytime, anywhere.

\bigcirc

More secure & private

Storj is the only solution with end-toend encryption for both data and metadata by default.

 \bigcirc

Enterprise-grade

Storj is S3 compatible, has unlimited scale, and meets the most stringent requirements for data protection.

multi-region access

Less data created with high durability and security

\bigcirc

Great performance

incredibly fast large file transfer and streaming. And that performance is more consistent across geographies.



Lower costs

Storj is just \$4 per TB for storage and \$7 per TB for egress, resulting in a typical savings of 80% or more.

Save your data. Save the planet.

Contact us to see how much you can reduce your carbon footprint and your storage bill.





© 2024 Storj Inc.