

# Exos<sup>®</sup> 4U100



## Data System with Exos X24 HDDs\*

### Sustainability report\*



#### Sustainability at Seagate

Seagate is committed to sustainable storage. Our engineering focus is on increasing storage capacity and utilization, while controlling the quantity and types of materials we use and improving energy efficiency and recyclability.

#### Sustainable design features

- Up to 30% lower power consumption and 70% improved cooling efficiency compared to previous generations.
- High-density storage enclosures maximize space utilization, reducing material usage.
- Base plate manufactured using 90% post-consumer recycled aluminum

#### Energy and greenhouse gases

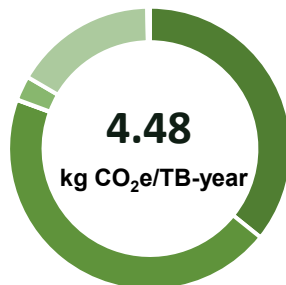
Manufacturing and using our products requires energy and produces greenhouse gas (GHG) emissions. We assess life cycle energy and GHG impacts and work towards improving energy and GHG efficiency and reducing ownership costs with each new generation of our products. Since 2022, our manufacturing facilities have operated using 100% renewable energy.

| Power consumption      | Per unit | Per TB |
|------------------------|----------|--------|
| Average idle power (W) | 1,560    | 0.61   |
| Operating (W)          | 1,750    | 0.69   |
| Average annual (kWh)   | 12,943   | 5.09   |

#### Greenhouse gas emissions by life cycle stage

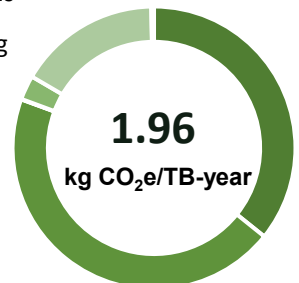
##### Use phase — conventional energy

|       |   |                   |
|-------|---|-------------------|
| 15.7% | ■ | Bill of materials |
| 19.6% | ■ | Manufacturing     |
| 0.0%  | ■ | Packaging         |
| 1.2%  | ■ | Distribution      |
| 63.4% | ■ | Use phase         |
| 0.1%  | ■ | End of life       |



##### Use phase — renewable energy

|       |   |                   |
|-------|---|-------------------|
| 35.8% | ■ | Bill of materials |
| 44.9% | ■ | Manufacturing     |
| 0.1%  | ■ | Packaging         |
| 2.8%  | ■ | Distribution      |
| 16.3% | ■ | Use phase         |
| 0.3%  | ■ | End of life       |



\*Results shown in this report are for the Exos data storage system including 100 Exos X24, Summit 24TB HDDs configured with the system

## Scarce resources

We aim to reduce our use of scarce resources during the life cycle of our products. We assess the water and mineral resource depletion impacts of our products in order to minimize dependence on key natural resources and reduce manufacturing and product ownership costs.

### Water consumption by life cycle stage

#### Use phase — conventional energy

|       |   |                   |
|-------|---|-------------------|
| 11.5% | ■ | Bill of materials |
| 30.7% | ■ | Manufacturing     |
| 0.1%  | ■ | Packaging         |
| 0.1%  | ■ | Distribution      |
| 57.7% | ■ | Use phase         |
| 0.0%  | ■ | End of life       |

#### Use phase — renewable energy

|       |   |                   |
|-------|---|-------------------|
| 24.7% | ■ | Bill of materials |
| 65.7% | ■ | Manufacturing     |
| 0.1%  | ■ | Packaging         |
| 0.2%  | ■ | Distribution      |
| 9.2%  | ■ | Use phase         |
| 0.0%  | ■ | End of life       |

### Mineral resource scarcity by life cycle stage

#### Use phase — conventional energy

|       |   |                   |
|-------|---|-------------------|
| 94.8% | ■ | Bill of materials |
| 0.1%  | ■ | Manufacturing     |
| 0.1%  | ■ | Packaging         |
| 0.0%  | ■ | Distribution      |
| 5.0%  | ■ | Use phase         |
| 0.0%  | ■ | End of life       |

#### Use phase — renewable energy

|       |   |                   |
|-------|---|-------------------|
| 99.8% | ■ | Bill of materials |
| 0.1%  | ■ | Manufacturing     |
| 0.1%  | ■ | Packaging         |
| 0.0%  | ■ | Distribution      |
| 0.0%  | ■ | Use phase         |
| 0.0%  | ■ | End of life       |

## Safer materials

As a leading supplier to major original equipment manufacturers, Seagate helps to establish standards for direct materials — components that make up our products — to meet customers' strictest specifications. We are meticulous about cataloging restricted substances; currently we list more than 2,000.

### Human toxicity\* by life cycle stage

#### Use phase — conventional energy

|        |   |                   |
|--------|---|-------------------|
| 100.0% | ■ | Bill of materials |
| 0.0%   | ■ | Manufacturing     |
| 0.0%   | ■ | Packaging         |
| 0.0%   | ■ | Distribution      |
| 0.0%   | ■ | Use phase         |
| 0.0%   | ■ | End of life       |

#### Use phase — renewable energy

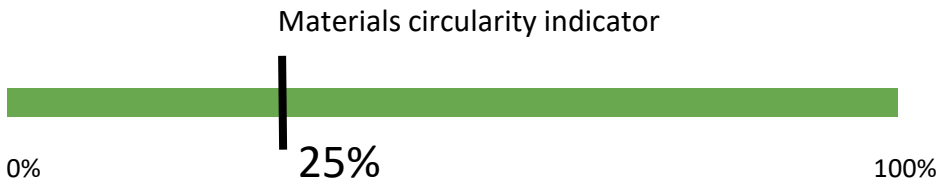
|        |   |                   |
|--------|---|-------------------|
| 100.0% | ■ | Bill of materials |
| 0.0%   | ■ | Manufacturing     |
| 0.0%   | ■ | Packaging         |
| 0.0%   | ■ | Distribution      |
| 0.0%   | ■ | Use phase         |
| 0.0%   | ■ | End of life       |

\*Human toxicity results are reported as total kg 1,4-DCB-eq. by combining the carcinogenic and non-carcinogenic midpoint indicators. These categories are calculated independently using ReCiPe impact assessment method and disaggregated results are available upon request. Results are driven primarily by non-carcinogenic human toxicity.

## Materials efficiency and circularity

Seagate recognizes the traditional “take, make, dispose” linear approach to business is unsustainable. We measure our progress towards a circular economy with a variety of indicators including material used per TB of storage, use of recycled content, reuse rates and recycling type and efficiency.

| Device weight — shipped (g) |                     | Per unit | Per TB |
|-----------------------------|---------------------|----------|--------|
| Drive                       | Enclosure           | 103,459  | 41     |
|                             | Media               | 27,509   | 11     |
|                             | Electronics         | 3,189    | 1      |
| Packaging                   | Cardboard and paper | 660      | 1      |
|                             | Other materials     | 228      | 1      |
| Total                       |                     | 135,046  | 53     |



| Key circularity parameters       | Per unit      |
|----------------------------------|---------------|
| Estimated operating life         | Five years    |
| Recycled aluminum in base plate  | 90%           |
| Recycled aluminum in other parts | World average |
| Recycled steel content           | World average |
| Recycled cardboard               | 100%          |
| Reused content                   | Zero          |
| Recycling rate                   | 25%           |
| Residual disposal                | 100% landfill |
| Reuse rate                       | Zero          |
| Recycling efficiency             | 95%           |
| Recycling collections efficiency | 90%           |

Seagate measures and reports its product sustainability performance on a TB-year basis. Seagate's drives come in different storage sizes and have different estimated useful lives. When referring to drive capacity, one terabyte, or TB, equals one trillion bytes. The TB-year measure combines these factors so that sustainability performance data is comparable across products and that annual impacts are directly reported. Seagate uses the Ecoinvent 3.10 Life Cycle Inventory database.