

CERNE™ GREENOPS VALUE REPORT

The business value of AI-powered GreenOps

What it is worth to move from reporting emissions once a year to measuring and reducing them every day, across data centers, clouds, AI workloads and devices.

15–40%

Reduction in carbon footprint

UnityOne published DCIM impact range.

~15–20%

Lower energy consumption

Tier III colocation case study.

Scope 1–3

Emissions accounting

Attributed down to the workload.

GPU-level

AI efficiency

Model, token and GPU insight.

In this report

1 · Where the value comes from

2 · Proof from an AI research enterprise

3 · Worked example: a 600 kW data center

4 · Value beyond the numbers

Percentages are UnityOne AI published figures from unityone.ai. The worked example on pages 4–5 is a model built on stated assumptions, not a quote or guarantee.

1 · WHERE THE VALUE COMES FROM

Four sources of value



Lower energy cost

Device-level power data and recommendations cut waste in servers, cooling and devices.



Lower emissions

Act on the highest-impact actions first, from virtualization to modernization.



More from AI infrastructure

Reclaim idle and oversized GPU capacity for priority workloads.



Less reporting effort

Traceable data and generated reports replace manual collection.

Risk reduced

Policy-as-code, approvals and audit trails mean every reported reduction can be proven, and no change puts performance or sovereignty at risk.

2 · PROOF

An AI research enterprise improves GPU utilization and cuts avoidable energy use

The challenge

- ! GPU capacity distributed across on-premises, private and public cloud
- ! Energy-intensive workloads that were hard to optimize
- ! No workload-level view of utilization, power, cost, carbon intensity and criticality
- ! Risk of affecting priority AI workloads when reducing waste

The solution

- ✓ Unified GPU utilization, power, workload, cost and carbon telemetry
- ✓ Classified workloads by priority, flexibility, deadlines and resource demand
- ✓ Identified idle, underutilized and oversized GPU allocations
- ✓ Recommended carbon-aware scheduling, right-sizing, pooling and reclamation
- ✓ Applied policy controls, approvals, rollback and audit trails to every action

Impact achieved

- ✓ Improved GPU utilization and capacity for priority workloads
- ✓ Reduced avoidable energy consumption and carbon exposure
- ✓ Balanced carbon, cost, capacity and performance in workload decisions
- ✓ Governed optimization across data center, cloud and Kubernetes AI environments

As published on unityone.ai. The case study does not publish percentage results.

3 · WORKED EXAMPLE

What GreenOps could be worth for a 600 kW data center

A transparent model. Each input is either a published UnityOne figure or a stated assumption you can replace with your own.

Input	Value used	Result
Average IT load	600 kW (assumption)	
PUE	1.6 (assumption)	8.41 GWh per year
Energy price	\$0.12 per kWh (assumption)	\$1,009K per year
Energy reduction	15–20% (Tier III case study)	\$151K–\$202K
Grid carbon factor	0.4 kg CO ₂ per kWh (assumption)	3,364 t CO ₂ per year
Carbon reduction	15–40% (published range)	505–1,346 t
Sustainability reporting	0.5 FTE at \$120K (assumption)	\$60K per year
Reporting effort saved	50% (assumption)	\$30K

\$151K–\$202K

Energy cost saved

Per year.

505–1,346 t

CO₂ avoided

Per year.

\$30K

Reporting effort saved

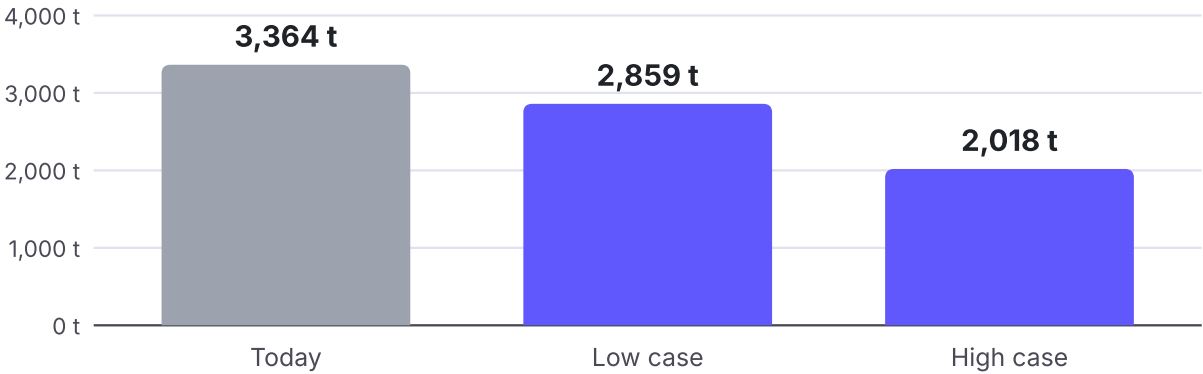
Per year.

3 · WORKED EXAMPLE, CONTINUED

Carbon and cost, side by side

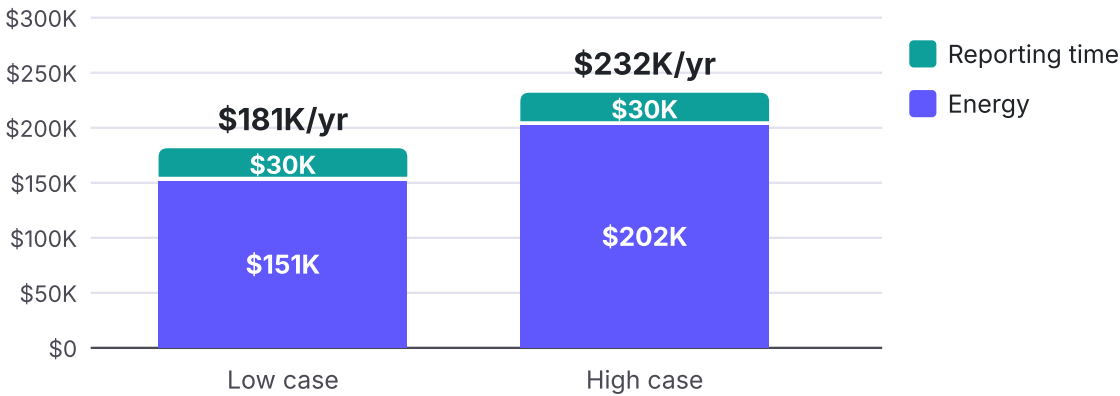
Annual emissions, before and after

Facility emissions of 3,364 t CO₂ per year, reduced by 15% (low) or 40% (high).



Annual savings

Energy: 15–20% of \$1,009K. Reporting: 50% of \$60K.



Three-year value: \$544K to \$695K in cost savings, plus 1,514 to 4,037 t CO₂ avoided, before subscription cost. Replace the assumptions on page 4 with your own, or ask our team to model your estate.

4 · VALUE BEYOND THE NUMBERS

What teams gain that a spreadsheet can't show

 Disclosure confidence Scope 1, 2 and 3 data traced to assets.	 Governed change Policy-as-code, approvals and rollback.
 Better AI economics More GPU capacity for priority work.	 Shared accountability Emissions per team, site and service.
 Answers on demand Leaders ask the AI assistant directly.	 One platform Carbon, cost and operations in Cerne™.

Build your own business case

Gather these inputs and our team will model your value with you:

- ✓ Average IT load and PUE per site
- ✓ Energy price and grid carbon factor
- ✓ Public cloud spend and regions
- ✓ Number of end-user devices
- ✓ GPU fleet size and utilization
- ✓ Time spent on sustainability reporting

GET STARTED

Model the value for your estate

Explore GreenOps hands-on in the UnityOne AI Playground, or ask our team to build a carbon and cost model for your sites.

▶ Enter Playground

✉ Contact Us

Email: contact@unityone.ai · Playground: cerne.unityone.ai · Sales: unityone.ai/contact-us