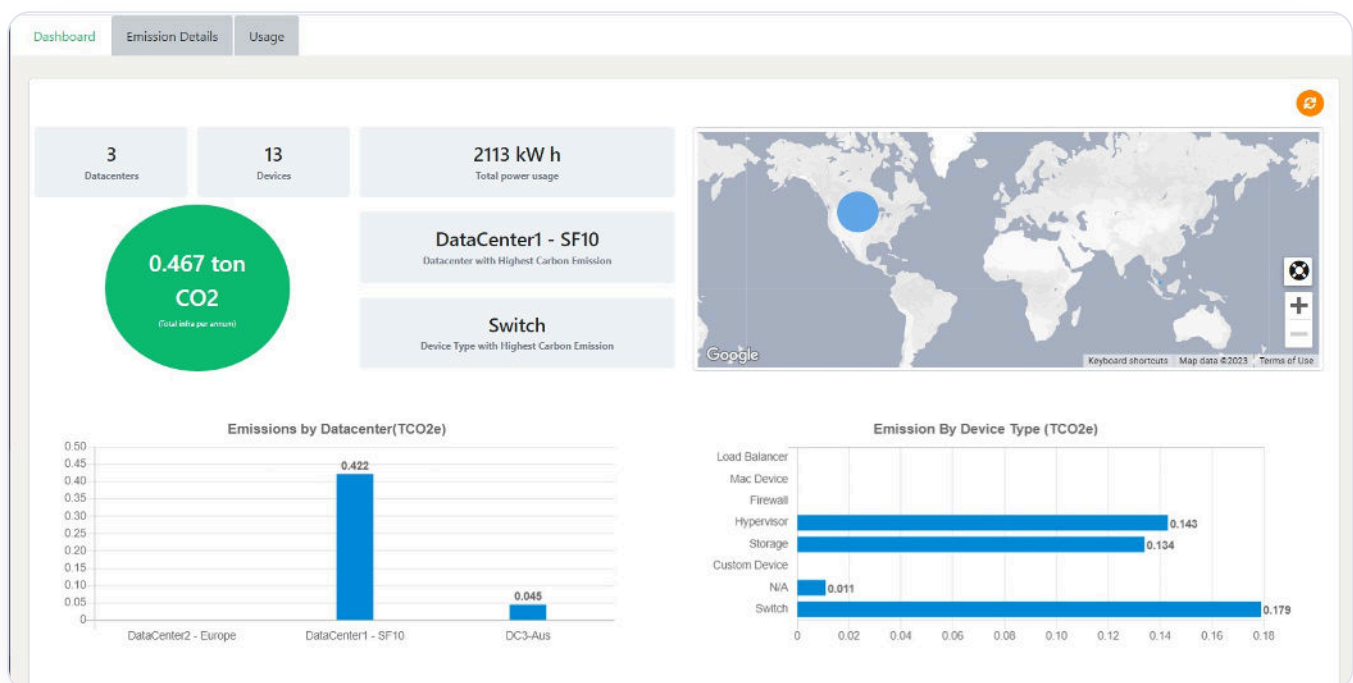


AI-powered GreenOps for hybrid & multcloud

Measure, understand and reduce the carbon impact of your hybrid and multcloud infrastructure, without performance or cost trade-offs.



Data center sustainability dashboard.

15–40%

Reduction in carbon footprint

Published DCIM impact range.

~15–20%

Lower energy consumption

Tier III colocation case study.

Scope 1–3

Emissions accounting

Attributed down to the workload.

PLATFORM OVERVIEW

What GreenOps covers

GreenOps is part of Cerne™, the UnityOne AI platform that also includes DCIM, HCMP, AIOps and FinOps, so carbon data shares the same inventory, telemetry and governance.

Area	Capabilities
Data center sustainability	Device-level power monitoring, emissions by data center and device type, PUE and cooling insight (with Cerne™ DCIM)
Private cloud sustainability	Emissions by private cloud, quarter, year and tag group
Public cloud sustainability	Integration with public cloud sustainability modules such as AWS and Google Cloud; emissions by account and service
End-user devices	Desktop, laptop and tablet energy and emissions by make, model, OS, region and department; uptime trends; end-of-life
External data	Sustainability dashboards for assets imported from .csv files
Recommendations	Multicloud carbon recommendations and tracking against carbon goals
Reporting	Sustainability dashboards and customized reports
GenAI	Private-LLM assistant for carbon questions

Measure, optimize, govern

MEASURE

Account for every layer

Energy, PUE, carbon intensity and Scope 1, 2 and 3, attributed to the workload.

OPTIMIZE

Cut waste and emissions

Rightsizing, GPU efficiency, storage lifecycle and workload relocation, tested first.

GOVERN

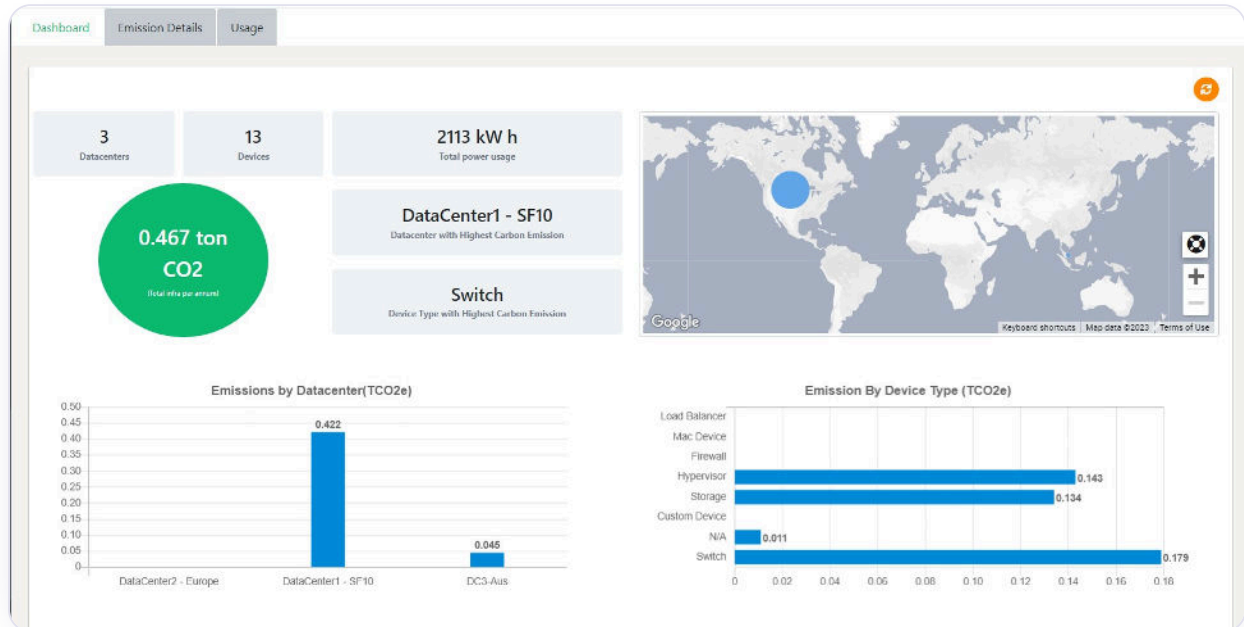
Prove it

Budgets and targets, policy-as-code, approvals, audit trails and reporting.

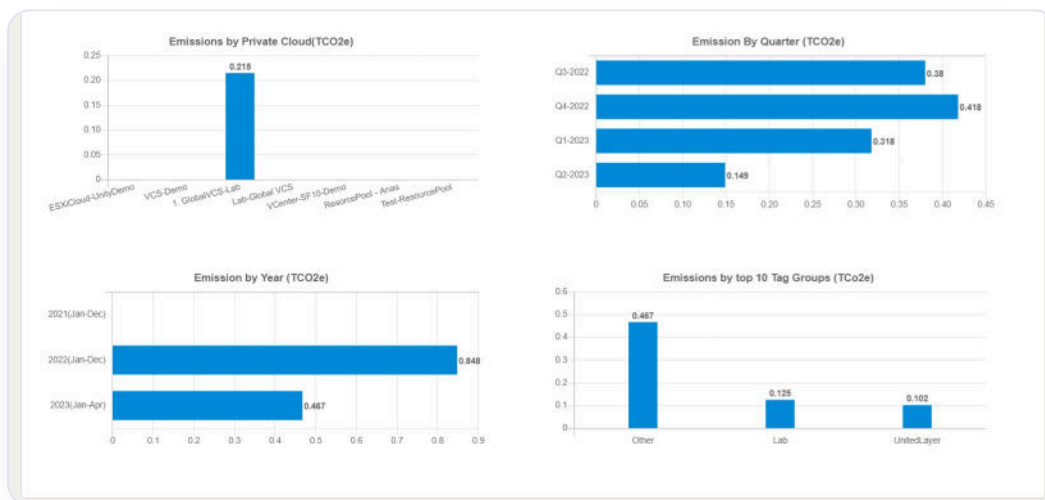
DATA CENTER & CLOUD VISIBILITY

One view across colocation, private and public cloud

Real-time telemetry ingestion into a unified estate view.



Data center sustainability: CO₂, power, and emissions by data center and device type.



Private cloud emissions by quarter, year and tag group.

Real-time telemetry

Power data per device, continuously.

Site ranking

Data center with the highest carbon emission.

Emissions by device type

Switches, servers, storage, hypervisors and more.

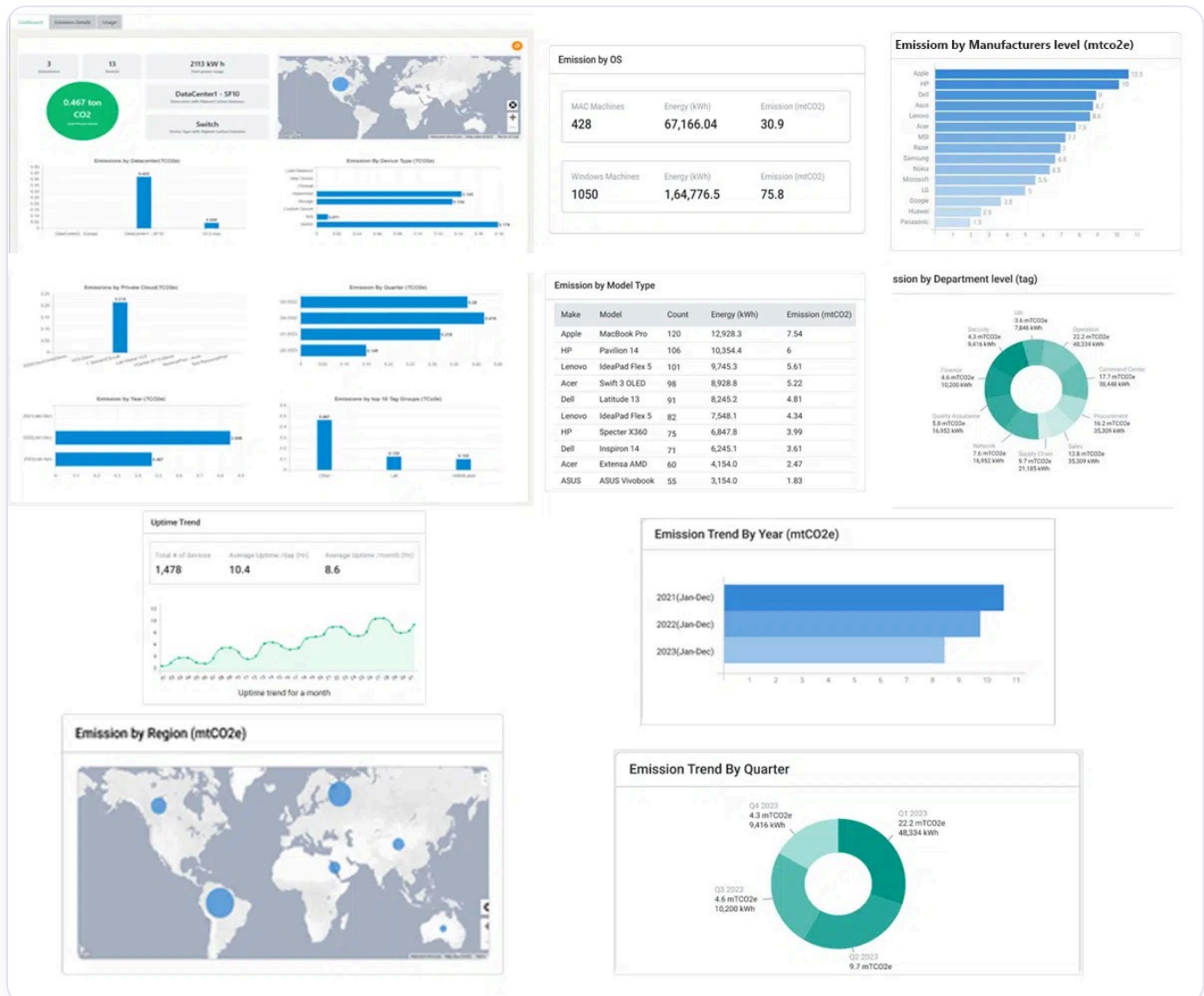
Map view

Sites and emissions on a world map.

WORKLOAD-LEVEL EMISSIONS ATTRIBUTION

Carbon traced to the application, container, VM and GPU

Attribute emissions to the workloads that cause them, with a Scope 1, 2 and 3 breakdown.



GreenOps analytics across region, OS, model, manufacturer, department and time.

App, container & VM

Emissions per workload, not just per site.

Scope 1, 2 and 3

Breakdown for disclosure and targets.

GPU-level attribution

Emissions for AI training and inference.

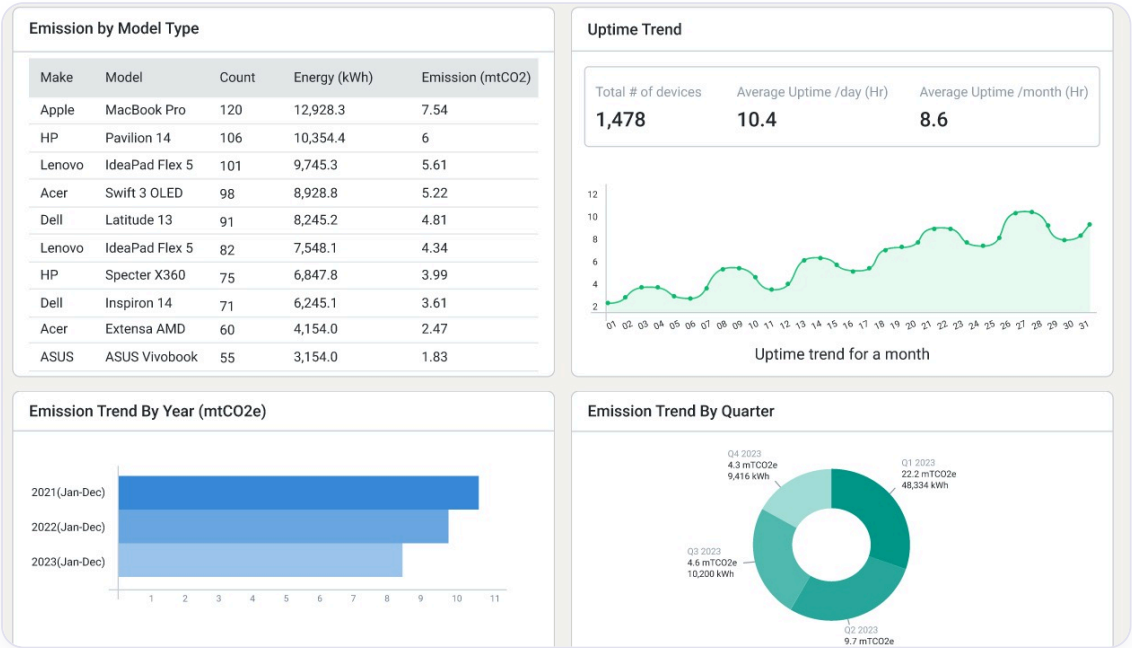
Energy, PUE, carbon intensity

Every factor in one calculation.

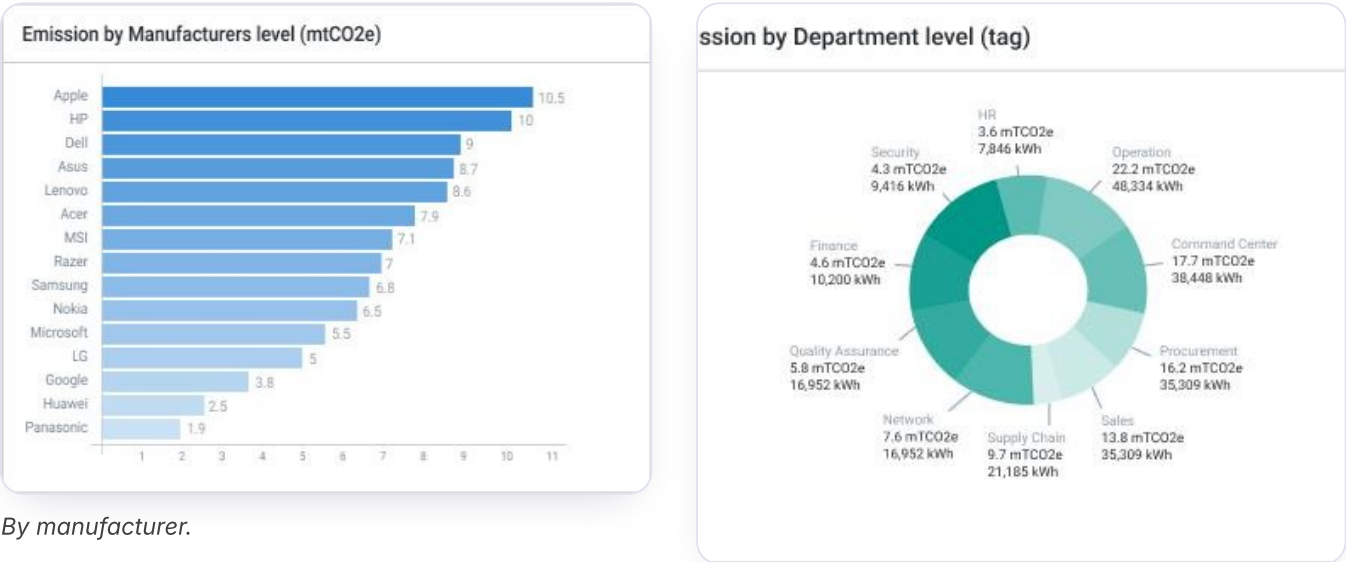
END-USER DEVICE SUSTAINABILITY

Every desktop, laptop and tablet

Energy and emissions for end-user devices by make, model, OS, region and department.



End-user devices: emissions by model, uptime and year.



By manufacturer.

By department.

- Make and model**

Count, energy and emissions per model.
- Department tags**

Emissions per team.

- OS comparison**

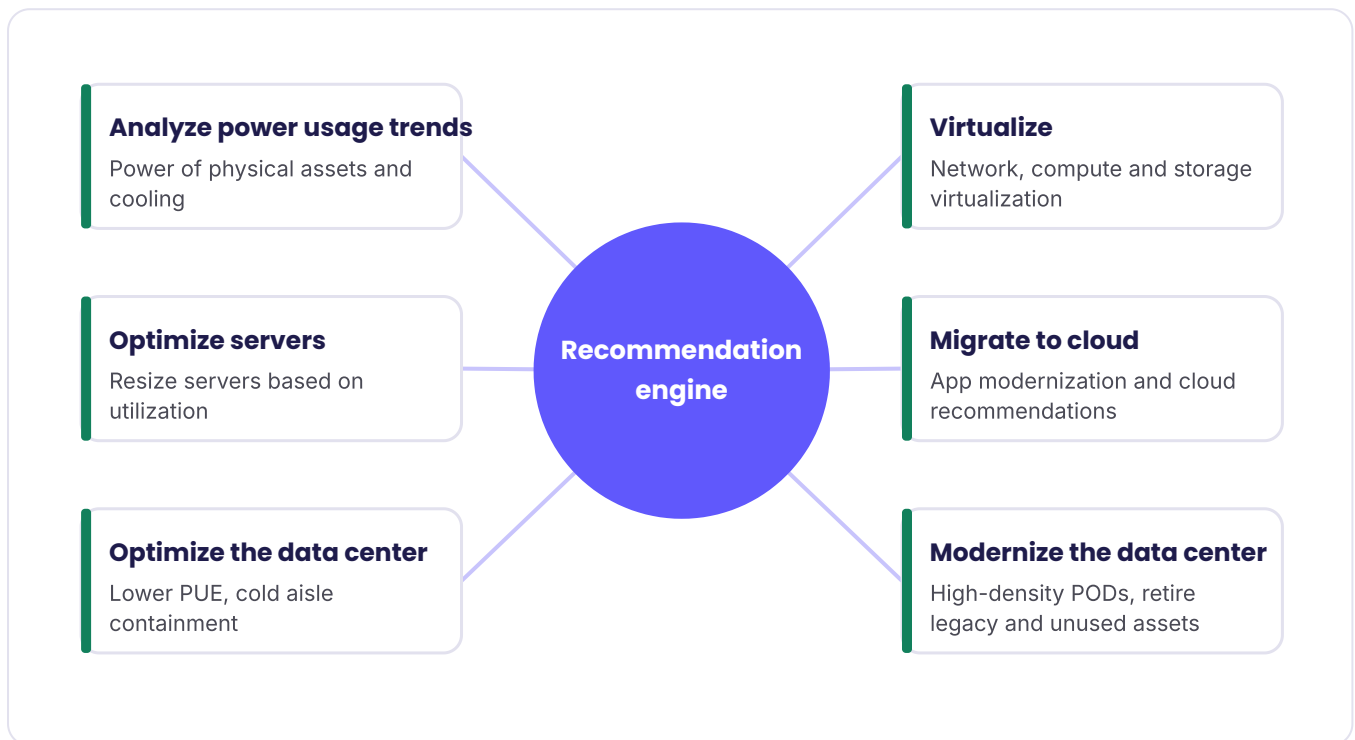
Windows and Mac fleets side by side.
- Uptime trends**

Average uptime per day and month.

SUSTAINABILITY RECOMMENDATIONS

The next best action, explained

Analyze infrastructure telemetry, utilization, workload criticality, cloud pricing, carbon intensity and sustainability goals to recommend the next best action.



Multi-objective

Carbon, cost, performance SLAs and sovereignty.

Closed loop

Realized savings measured and fed back to the model.

Explainable

Projected impact before every recommendation.

Scenario planning

Rightsizing, GPU, storage lifecycle and relocation tested first.

AI & GPU SUSTAINABILITY, GOVERNANCE AND REMEDIATION

Efficient AI, governed change

Model, token and GPU-level efficiency for the AI factory, enforced with policy-as-code, guardrails and approvals, and proven with audit trails.

- 

GPU efficiency
Idle, underutilized and oversized GPU allocations.
- 

Model & token intelligence
Training and inference optimization.
- 

Carbon-aware scheduling
Pooling, reclamation and workload relocation.
- 

Policy-as-code
Budgets, targets, guardrails and approvals.
- 

Closed-loop remediation
Automated fixes with rollback.
- 

Audit trails
Every action recorded for reporting.

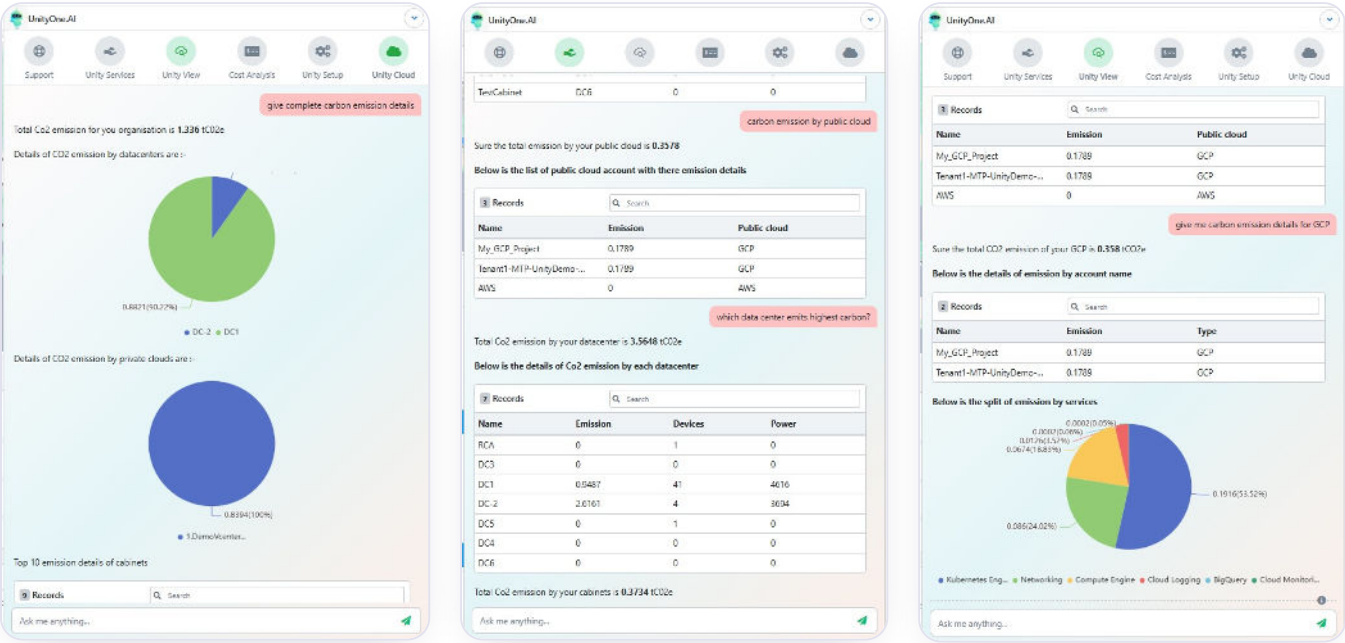
25 Policy						
Q Enter Keyword						
Name	Type	Scope	Alerting		Notification	
			Enable	Disable	Enable	Disable
Policy 1	Resource Quota	Group	Enable	Disable	Enable	Disable
Policy 2	Auto-Scaling	Cloud	Enable	Disable	Enable	Disable
Policy 3	Tagging and Naming	Organization	Enable	Disable	Enable	Disable
Policy 4	Security Compliance	Tag	Enable	Disable	Enable	Disable
Policy 5	Cost Control	Organization	Enable	Disable	Enable	Disable
Policy 6	Image and Template	Cloud	Enable	Disable	Enable	Disable
Policy 7	Geographic Deployment	Cloud	Enable	Disable	Enable	Disable
Policy 8	Security Compliance	Group	Enable	Disable	Enable	Disable
Policy 9	Tagging and Naming	Tag	Enable	Disable	Enable	Disable
Policy 10	Resource Quota	Organization	Enable	Disable	Enable	Disable

Cerne™ policies with scope, alerting, notification and status.

GENAI SUSTAINABILITY ASSISTANT

Ask about carbon in plain English

A private-LLM assistant answers emissions questions with tables and charts.



Organization totals

Total CO₂ and the split by data center.

Cloud breakdowns

Emissions by public cloud account and service.

Technical specifications at a glance

What Cerne™ GreenOps measures, analyzes and governs.

Area	Specification
Scope	Data centers, colocation, private cloud, public cloud, end-user devices, imported (.csv) assets
Public cloud	Integration with public cloud sustainability modules such as AWS and Google Cloud
Metrics	Energy (kWh), power per device, PUE, carbon intensity, emissions (tCO ₂ e), uptime
Attribution	Site, device type, application, container, VM, GPU, region, OS, model, manufacturer, department and tag
Accounting	Scope 1, 2 and 3 emissions
Recommendations	Power trends, server optimization, data center optimization (PUE, cold aisle), virtualization, cloud migration, modernization
Governance	Budgets, targets, policy-as-code, guardrails, approvals, rollback, audit trails
Reporting	Sustainability dashboards and customized reports
AI	Private-LLM assistant; GPU, model and token efficiency
Deployment	SaaS or on-premises as part of Cerne™; multi-tenant

CUSTOMER STORY

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.

GET STARTED

See Cerne™ GreenOps in action

Explore the platform hands-on in the UnityOne AI Playground, or talk to our team about measuring and reducing the carbon impact of your hybrid estate.

▶ Enter Playground

✉ Contact Us

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