Sustainability Benefits of Coder Cloud Development Environments



Coder's cloud development environments offer a balance of developer productivity, security, and environmental responsibility. Here's how Coder helps organizations reduce waste, optimize resource usage, and align with green initiatives.

THE OPPORTUNITY

Driving Sustainability with Cloud Development Environments

Sustainability is an essential goal for enterprises, and Coder offers a way to achieve it while enhancing DevEx and security. By reducing waste, optimizing resources, and extending hardware lifespans, Coder empowers teams to align innovation with environmental responsibility. Here's how Coder makes it possible:

Optimized Resource Usage

- On-Demand Infrastructure: Environments only run when developers actively need them, reducing energy consumption.
- Shared Resources: Multiple workspaces can share a single VM, minimizing idle infrastructure.
- Real-World Example: Skydio consolidated 10 developer workspaces on a single VM without performance issues, cutting energy consumption and costs.

Proactive Resource Management

- Autostop Workspaces: Halts unused environments, saving energy, and costs.
- Resource Quotas: Prevents over-provisioning and runaway costs at the developer level.
- Workspace Scheduling: Automatically starts environments when developers typically need them, ensuring readiness without waste.

Longer Hardware Lifespans

- Reduced Hardware Demands: Developers can rely on lightweight thin clients instead of high-performance laptops.
- For ML Engineers and Data Scientists: No need for expensive local GPUs—cloud-based resources handle intensive computational training.
- Environmental Impact: Extends device lifespans, keeping laptops out of landfills and reducing the demand for high-spec machines.

Key Features Powering a Greener Workflow:

Multi-cloud

Coder runs on-premises and on any cloud, including AWS who will operate on 100% renewable energy by 2025

Workspace autostop Automatically stop inactive workspaces

after a set time to avoid unnecessary infrastructure usage

Workspace scheduling

Schedule workspaces to only start on the days and times when developers are most likely to need them

Resource quotas

Set infrastructure usage limits at developer and team levels to prevent excessive resource and energy consumption

Resource optimization

Host multiple developer workspaces on a single VM with no performance loss, minimizing overprovisioning and energy waste

With more than 90k GitHub stars, Coder provides Global 2000 enterprises with remotely accessed cloud development environments. Coder's platform improves developer experience while strengthening companies' security posture by moving source code and data from laptops to their centrally managed infrastructure.









