



Knight Technology Solutions

A Division of Knight Technology Group, LLC.

GREEN TECHNOLOGY & CARBON INITIATIVES



Knight Technology Solutions Green Technology and Carbon Initiatives

The power requirements of an IT physical infrastructure, from cooling to back-up power systems, are increasingly eating into budgets — cooling alone can account for 40 percent of the data center's total costs. At the same time, a widely cited forecast predicts that by 2025, the information and communications technology industry's electricity consumption will balloon to 20.9 percent of the entire global total, and thus account for 5.5 percent of global greenhouse gas emissions.

In contrast to these concerning projections, successful cases of digitally transformed data centers are emerging around the world. This new breed of data center, whether a cloud / colocation provider or an edge site, can deploy 20 percent faster with modular infrastructure. In terms of operation, stories such as China Unicom's paint a hopeful picture of what is now possible. In two of their hyperscale cloud data centers, totaling over 600,000 square meters, they have achieved 99.999 percent uptime while cutting operational costs by over 30 percent. This ability to do more computing with less cost was made possible through an integration of supervisory software, cloud analytics, and on-site expert support.

Our Solution Benefits

Serviceability

- Modular Components simplify replacement and reduce mean time to repair

Availability

- Active Response Controls monitor and actively adjust cooling capacity to ensure proper server inlet temperatures

Total Cost of Ownership

- Close Coupled Cooling improves operational efficiency 30%-50% over traditional data center cooling approaches
- Variable speed fans reduce energy consumption during off-peak cooling periods and adapt to unpredictable power densities

Flexibility

- Adapts to work in both new and existing data center environments

Manageability

- Real time display of current and available cooling
- User-friendly touch screen display

Tax Incentive Programs for Green Technology and Carbon initiatives

- Companies utilizing available technologies to capture at least 1,000 metric tons of carbon qualify for the 45Q tax credit.
- Power companies offer tax incentives to build renewable energy projects, lowering your energy costs and carbon footprint.
- Section 179 tax deduction is an economic incentive offered by the U.S. government to encourage companies to invest in their energy future by making qualified equipment purchases.

These are just a few of the many programs offered to reduce your energy costs and carbon footprint. Specifics of the available tax credits and incentives are complicated. Knight Technology Solutions is here to eliminate those complexities.

Get in Touch

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