



VERTIV WHITE PAPER

Vertiv's Commitment to Sustainability

Guiding Principles

We improve product performance to help customers meet their objectives for conserving energy and water and reducing carbon footprint.

We implement processes and innovations in our facilities to conserve energy, water and other resources and reduce greenhouse gas emissions.

We comply with all applicable laws and regulations and seek to reduce and, where possible, eliminate hazardous waste through source reduction and recycling.

We conduct regular training to ensure our employees' knowledge of updated laws and regulations, pollution-prevention and waste-minimization practices, and technological developments.

We audit our operations to confirm compliance with these principles.

Helping Customers Enhance Sustainability

Vertiv products for critical infrastructure power, cooling and management are designed to help our customers reduce their use of energy, water and space. We also work hand-in-hand with customers on data center designs and system architectures to support their sustainability objectives, from “green” facilities to hybrid implementations. We also participate in numerous industry and governmental initiatives aimed at reducing energy usage and testing and certifying products. Key achievements include:

Energy Logic

We spearheaded the IT industry’s development of Energy Logic, a 10-step roadmap for driving improvement in IT efficiency and support systems. Energy Logic demonstrated that a 1 watt savings at the processor level had a cascading effect across other systems, producing nearly three times that level of savings at the facility level. Vertiv has been sharing this detailed strategy openly with the world for more than a decade, helping facilities reduce their energy use by up to half.

Product Efficiencies

Vertiv’s thermal management solutions lead the market in efficiency and water reduction. Vertiv estimates our water-free cooling systems have saved billions of gallons of water a year worldwide since their introduction in 2013, with each deployment saving 6.75 million gallons of water per year compared to open-loop water-based systems. We have also pioneered the use of system-level thermal management controls that enable thermal systems across the data center to intelligently collaborate to reduce energy consumption.

Through these controls and advanced heat exchanger technology, the thermal management line enables customers to achieve PUE ratings as low as 1.05.

Vertiv has achieved industry-leading AHRI Certified® status¹ for hundreds of its cooling models for efficiency and capacity performance.



Vertiv’s power protection solutions deliver the highest level of efficiency available in the industry, with available efficiencies above 98.5% for a Class 1 UPS (as defined by IEC 62040-3). Vertiv’s experts work with customers to find the most efficient solution for each facility’s specific needs. We also lead the UPS industry in designing lithium-ion battery systems for data centers, which have proven to be more environmentally friendly than traditional battery technologies and last three times longer, reducing waste. We offer ENERGY STAR qualified UPS systems in eight product lines, covering 78 models.

Vertiv helps telecom carriers save a significant amount on their electricity bills and eliminate the release of millions of tons of greenhouse gasses through its high efficiency rectifiers. In the near future, Vertiv will release a high efficiency rectifier with up to 98% efficiency to further save energy and reduce the release of CO₂.

Data Center Assessments

Vertiv is a trusted advisor to companies seeking data center energy savings. We offer an energy optimization service for data centers and computer rooms that recommends product upgrades and replacements that yield verified energy reductions up to 60% and improvements in IT load capacities.

In Australia, Vertiv has achieved ISO 14001 environment management system certification and has a NABERS accredited engineer for conducting data center assessments.

¹ AHRI Certified® is a registered trademark of the Air-Conditioning, Heating, and Refrigeration Institute.

Vertiv Facilities

Throughout the world, Vertiv is undertaking numerous initiatives to improve operational sustainability and continually exceed customer expectations. We are implementing changes that maximize safety for our workers, improve the environmental profile of our facility operations and encourage more efficient use of natural resources in our manufacturing processes.

The Americas

- In the U.S., Vertiv has designed and built many of its new facilities following Leadership in Energy and Environmental Design (LEED) certified standards, incorporating sustainable design principles, technologies, and best practices.
- Vertiv has recycling programs in place at its manufacturing and office facilities for used oil; electronic waste; used batteries; waste metals including, copper, aluminum, steel, etc.; waste cardboard; and used lamps.
- Lighting has been upgraded in most locations to improve energy efficiency.
- Reduction of water usage is practiced in most manufacturing facilities, most notably in Reynosa and Mexicali, Mexico. The Vertiv Reynosa facility is working on a very large water reduction project which will recycle and reuse air conditioning condensate water to help power at least two buildings.
- Our Americas manufacturing and major service facilities undergo scheduled third-party environmental audits. This process includes an in-depth analysis of compliance with all environmental activities and applicable laws at each facility.
- All other facilities will conduct an environmental self-assessment for selected elements.

Europe, Middle East and Africa

- Our European operations have achieved Silver Level status in the EcoVadis system of tracking and improving CSR performance.
- Working toward a defined set of environmental objectives with quarterly KPIs, European operations recycle 80% of all waste in major facilities, including cardboard, lights, oils and paper.
- All major locations are subject to Energy Savings Opportunity Scheme (ESOS audits) every five years. Each audit yields projects to reduce energy consumption and therefore emissions. Target reduction is 5% annually.

- Auto fleets have been upgraded to increase use of hybrid technology to reduce fuel consumption.
- Renewable energy accounts for 30% of our total power load.
- All manufacturing facilities are ISO 14001 accredited which means they are designed to better manage the impact of activities on the environment and to demonstrate sound environmental management. Thirty-three percent of facilities are environmentally audited each year.

Asia Pacific

- China manufacturing facilities have achieved certification for ISO 14001 environment management system certification, which has helped to reduce pollutants and emissions, and promote waste recycling, energy conservation and raw materials reduction.
- These facilities also have achieved ISO 50001 certification, which gives organizations a recognized framework for developing an effective energy management system to implement relevant state laws and regulations, control business risks and establish a mechanism for continually improving energy management performance.
- These factories have achieved the OHSAS18001 certification, which aims to reduce and prevent loss of life, property and time due to accidents, and damage to the environment.
- Factories in China are implementing energy conservation and consumption reduction actions, including:
 - Replacing the resistive load with feedback load to reduce power loss. The feedback load can save more than 80% of energy compared to the resistive load.
 - Power factor compensation for MV workshops to improve the power factor and reduce reactive power loss.
 - Lighting partition rectification in each workshop. Lighting can be individually controlled for each workshop, reducing the waste.
 - Lighting upgrades for factory workshop. Replacing fluorescent bulbs with a more energy-efficient LEDs.

As opportunities arise to reduce impacts on our environment, Vertiv will develop new innovations and ways of doing business that support the sustainability objectives of our customers and achieve sustainability within our own business.



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