

The History of CDW's beGreen Program

CDW recognizes the need for responsible environmental management and conservation of resources and has demonstrated its commitment to environmental management and principles of sustainable development through its beGreen program. The beGreen program provides coworkers with a platform to reduce, reuse and recycle in an effort to make CDW's operations leaner, more efficient and more environmentally responsible. CDW is committed to reducing energy demands, managing energy consumption and reducing environmental impact, while realizing economic growth and opportunities. CDW continually works to develop our efficiencies, waste reduction and comply with ISO 14001 standards. Since the inception of the program, CDW has seen overwhelming coworker participation in beGreen. They have the opportunity to share their green ideas with CDW and organize our sustainability goals. Coworkers have consistently responded to the campaign with suggestions, ideas and questions. The feedback has been positive and the level of participation has surpassed our expectations.

CDW has a cross functional team of coworkers who contribute to the program management, the beGreen Team. The team consists of an Environmental Programs Manager who works with designated "Captains" and "Rangers" in multiple CDW locations nationwide. The Captains and Rangers, in turn, work to ensure the consistency and integrity of the beGreen program, as well as share feedback on concerns and support with each location's needs. In the eight years since its inception, beGreen has continued to thrive and grow.

beGreen focuses on several key areas: coworker education, community awareness, recycling, resource conservation and ISO 14001 standard. We aspire to become an industry leader in environmental responsibility, because it's the right thing to do. We're proud of our innovative programs, strong recycling and the energy saving efforts that CDW has implemented and we continually improve upon these efforts.



ISO 14001:2004 Certification



We are proud to report that CDW's distribution centers are ISO 14001 certified – the international standard for environmental management systems. This certification has been awarded to CDW's distribution centers located in Vernon Hills, IL. and North Las Vegas, NV.

"CDW is committed to sustaining a strong environmental policy that helps protect the environment and provides our customers with an efficient and cost-effective way of doing business," said Jon Stevens, Senior Vice President, Operations and Chief Information Officer at CDW. "We are honored to receive this certification as a validation of these ongoing efforts, and we appreciate our coworkers' dedication to serving the needs of our environment and customers."

CDW's Environmental Management System (EMS) establishes a common reference for communicating environmental management issues between CDW and its partners, customers, regulators and other stakeholders. Further, this system provides organizational structure, practices, procedures, training, processes and resources for implementing, reviewing and maintaining CDW's environmental policy.

Sustainability at CDW



In connection with the beGreen program, CDW continually improves upon our environmental sustainability. Here are some notable highlights regarding the many steps we've taken to make a difference:

Lighting & Energy Management:

- Our offices and Distribution Centers are outfitted with automated climate control systems that only run when the space is occupied to help ensure we don't waste power after hours.
- The Vernon Hills Distribution Center's conveyor system detects when a product has not been carried on the line for longer than 5 minutes and automatically shuts down until a coworker restarts the line.
- The Las Vegas Distribution Center's control system is designed to monitor outside and inside temperatures
 and throttles the system up and down accordingly. In the spring and fall seasons, the system is able to use
 outside air for cooling.
- In our Vernon Hills location, we added tank less water heaters to our Daycare/Fitness Center and to our café to reduce energy consumption by only heating water when needed.
- In 2015, the Las Vegas Distribution center has updated all of their 455 watt metal halide high bay light fixtures with 192 watt LED fixtures with motion control sensors built into the fixtures for improved control, to reduce power usage, and to minimize out impact on the environment.
- In 2016, the CDC updated the warehouse and parking lot with LED lights containing motion sensors. This allows us to reduce our power usage while minimizing our impact to the environment.
- In 2016, the CDC put in new air compressors that are more energy efficient to avoid the wasted or high use energy.

Waste Management:

- CDW offers coworkers incentives to refill their drinking containers in our cafés to encourage the use of reusable bottles and cups.
- A company-wide, internal toner cartridge recycling program was implemented to ensure proper disposal of cartridges.
- CDW's Vernon Hills location compost all back of the house materials from our cafeteria to gain enriched soil and remove the products from the landfill.

Eco-friendly Alternatives:

- Our maintenance crews replace petroleum-based degreaser products, when possible, with a citrus-based cleaner/degreaser that is made from natural products and is better for the environment.
- Our cleaning crews also use natural and vinegar-based cleaners in place of chemical cleaners that can be harmful to the environment.

Coworker Engagement:

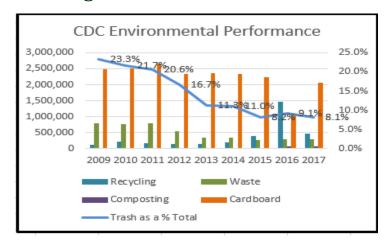
- Multiple locations participate in our annual Earth Day celebration, intended to educate coworkers on sustainability by providing them with information and products. Additionally, CDW's participation in Earth Hour encourages everyone to adopt energy efficiency measures to consume less energy, water and other natural resources. These events are held to assist our coworkers in considering sustainable opportunities both at work and home.
- In 2016, CDW Illinois locations won the Illinois Governor's Sustainability Award which showcased the hard work put into our sustainability efforts.

Recycling at CDW

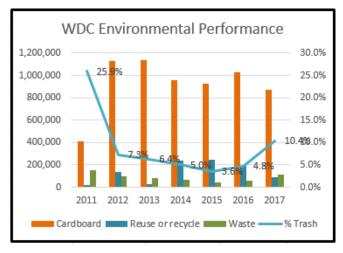
CDW reduces and eliminates waste, when possible, through recycling. All waste is safely and responsibly handled and disposed. We also reuse when ever possible to avoid the waste stream and recycling efforts. Our Distribution Centers employ programs that are designed to recycle corrugate, shrink wrap, wooden pallets and paper. In 2017, we recycled approximately 1,400 tons of corrugate, 1700 tons of wooden and plastic pallets, 260 tons of shrink wrap and other recyclables and 290 tons of paper¹. While fluctuations vary depending on the volume received each year, our recycling efforts have resulted in a consistent reduction in our waste hauls from three times a week to only twice a year. Due to comingled recycling the Las Vegas Distribution Center has realized a 96% diversion rate for waste. To the right is a graph displaying the total recycling results CDW has achieved at its Distribution Centers.

4,500 4,000 3,500 2,500 2,500 1,500 1,000 2011 2012 2013 2014 2015 2016 2017

Reducing Waste—Central Distribution center



Reducing Waste—Western Distribution center



As a part of our ISO 14001 certification, CDW set a goal for 2018 to reduce the impact of waste sent to landfills by ensuring recyclable items are properly disposed of through our network of recycling bins at our Vernon Hills Distribution Center. We will also work to maintain the 96% diversion rate at our Las Vegas Distribution Center. To the left is a look at our annual tons recycled as compared to our waste tonnage at our Vernon Hills and Las Vegas distribution centers.

Numerous recycling centers have been set up on each floor of our office locations, making it easy and convenient for coworkers to recycle plastic, cardboard, aluminum, glass and other materials. Signs are posted in each recycling area making it easy for coworkers and visitors alike to join CDW in its ongoing commitment to environmental



^{*}Paper count includes attached office recycling in the 200 N Milwaukee Ave building.

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Packaging & Transportation

CDW supports environmentally friendly shipping methods through efficient use of materials and natural resources. We achieve this through our shipping partners, recyclable packaging and smart packaging systems.

 Over 95% of our shipments use carriers that are enrolled in the EPA Smart Way Transport Partnership².



- Our pick-pack shipping containers are made of the maximum allowable amount of post-consumer recycled material and are 100% recyclable.
- We are also focused on increasing capacity utilization in our supply chain through effective transportation routing and carrier usage. CDW Logistics works to consolidate shipments with suppliers to limit the amount of movement and touches along the supply chain, which enables carrier partners to reduce their CO2 emissions.
- We use manufacturer packaging when possible, with more than 50% of our shipments being sent in the original manufacturer packaging, instead of being repackaged in new boxes.
- We have also redesigned our box estimation program to use the least amount of packaging necessary, while
 achieving industry best-in-class levels and ensuring customer satisfaction. Today, our systems take into
 account the dimensions and weight of product to maximize the amount of product put into each box.
- We have implemented envelope shipping for small items that do not have a high risk of damage. This will limit the amount of packaging required for recycling by the customer after receipt. The envelopes are made from 100% recycled material and are 100% recyclable.



²"The Smart Way Transport Partnership helps freight companies improve fuel efficiency, increase environmental performance, and increase supply chain sustainability." — EPA

CDW's Data Centers

CDW has an ongoing commitment to energy efficiency in our data centers. We test and implement new tools and programs to continuously improve our energy usage and to help control operational costs. Our data centers have performed key upgrades to allow us to enhance and measure these efficiency improvements:



- All light bulbs and ballasts have been replaced with high efficiency equivalents.
- Our Minneapolis office location installed a light timer that saves roughly 8 hours of "lighting time" daily. The
 estimated savings of having these 668 lights off for 8 hours per day translates to a savings of just under
 20kWh of power saved daily.
- The HVAC systems in the Madison & Minneapolis office locations were redesigned to improve efficiency by allowing the air conditioners to consistently operate at their peak efficiency thereby reducing energy usage.

Power Usage Effectiveness (PUE) monitoring has been deployed in both the Madison and Minneapolis locations. This real time efficiency monitoring meets EPA standards for measuring data center PUE and provides CDW with a view of our energy efficiency so adjustments can be made while also gauging the effectiveness of our efforts. To date these efforts have paid off in our data centers and have resulted in the following savings:

- Air conditioning set points were increased by an average of 6 degrees, translating to a cooling utility savings of nearly 25%.
- Annual energy cost avoidance savings to date is over \$300,000 and growing.

