



IDC Visits Canon Virginia to Observe the Company's Impressive Sustainability Accomplishments

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IDC's Quick Take

IDC had the recent opportunity to visit [Canon Virginia](#) and see the company's sustainability efforts firsthand. We also had the chance to visit Canon Environmental Technologies Inc. (or CETI) in nearby Gloucester, Virginia, where Canon print cartridges, toner, and desktop printing equipment are recycled or refurbished.

Event Highlights

Located in Newport News, Canon Virginia opened its doors in 1985 as a copier manufacturing facility. The company now includes toner cartridge production, injection mold tooling, remanufacturing of office equipment, digital consumer product repair operations, and reclamation and recycling of product components as part of its core operations.

Combined, the organization has an employee base of approximately 1,000 employees that annually recycles hundreds of millions of pounds of aluminum, cardboard, and plastics. Additionally, the recycled plastics and excess parts of the MFPs during manufacturing are primarily used to make new print cartridges but are also used to manufacture new drum covers at several factories in the Canon Group.

IDC's Point of View

What Is Canon Doing to Positively Impact the Environment?

Canon offered presentations that highlighted several impressive statistics about the company's sustainability achievements. Among the most notable were:

CO2. Canon's energy-saving technologies have resulted in a CO2 reduction of 28.2 million tons. The company also noted that it has reduced life-cycle CO2 emissions of products by 40% since 2008. This is an average of 4.7% per year. Last, the imageRUNNER ADVANCE DX C5800 emits an estimated 13% less CO2 during use than its predecessor model.

Weight. The [Canon imageRUNNER ADVANCE DX C5800](#) series is 25% lighter in weight and more compact than previous models. The company slimmed down the outer frame and is using plastic in some parts without sacrificing quality and reliability.

More remote management. Canon engineers and channel service techs can resolve more support inquiries via screen and live video streaming. This can help reduce energy consumption as an alternative to dispatching staff to customer sites for all service calls. In addition, automatic toner replenishment brings more efficiency in the delivery of aftermarket products. As an added benefit, cartridge shipments are often combined to address multiple Canon machines at the same customer location.

Packaging. Select imageRUNNER ADVANCE DX models feature cardboard packaging. No Styrofoam is used for the packaging of these models. All cardboard used for packaging is from sustainable or recycled sources.

Standardized operation. Canon uses the same consistent quality and evaluation standards across all global manufacturing and recycling locations. In addition, all MFP assembly processes are standardized across all locations as is all injection molding, packaging, and press metal processes.

Perhaps the most significant achievement is that Canon is the first printer/MFP manufacturer to achieve the new [EPEAT Climate +](#) standard across its imageRUNNER ADVANCE DX series. EPEAT Climate+ is intended to help buyers identify technology products designed and manufactured with climate change mitigation in mind. The company received word of its Climate+ accomplishment within the past couple of months, so this is relatively new news.

Canon Virginia Has Several Environmentally Beneficial Activities in Place at Its Operations

The Canon Virginia facilities have demonstrated substantial environmental sensitivity through several sustainability innovation projects.

Recycled Toner Pellet (RTP) Project. When Canon receives used toner cartridges, the company collects any remaining toner in the cartridges and converts it to small pellets. These pellets are sold to a local partner, [Basic Construction Company](#) LLC., where they are used as a binding and coloring agent in asphalt for Virginia roadways, which provides a cost advantages for this partner. Canon recycles more than 400 tons of toner annually, resulting in a \$150,000 profit increase.

Camera Battery Recovery/Reuse Project. Prior to the implementation of this project, more than 300,000 Canon rechargeable camera batteries went to the waste stream. Today, nearly all Canon camera batteries returned to the company are tested for recovery and reuse. The project saves more than \$1 million annually.

Oil/Water Evaporator Project. Before this project began, more than 14,000 gal of oily water was sent offsite for treatment and disposal. The project eliminates this waste stream through an evaporation process. The remaining oil is recycled at no cost to Canon Virginia. The estimated annual cost savings is more than \$29,000.

High Impact Polystyrene (HIPS) Recycling Project. Prior to the start of this project, all high impact polystyrene received by Canon was sent to a third-party recycler for purifying at a cost. Now, all HIPS go through an open loop recycling process and purified in-house. The company estimates that 90% of its high impact polystyrene is currently recycled to make new print cartridges. The project not only eliminated a wastewater stream but also reduced the need to purchase plastic for new print cartridges. The estimated annual cost savings is \$1.26 million.

Clamshell Recycling Project. Prior to this project, all clamshell packaging was a waste product and was subsequently sent to an outside facility for disposal at cost. Now, clamshell packaging is shredded and sold to a local recycler. Thus it eliminates this waste stream. Canon estimates that more than 190,000 pounds of clamshell packaging material is recycled and reused annually.

ACM Water Reclaim Project. This project was initiated to capture wastewater from parts washers and condensate from air-conditioning units for use in cooling towers. Since the project implementation,

more than 28 million gallons of water have been saved and the company has avoided an estimated \$27,300 annual cost in water and sewer charges. The cumulative savings over several years is now approaching nearly \$500,000.

Solar Panel Replacement Project. Canon Virginia installed solar array panels in 1994 and are beyond the rated life period. New solar array panels are scheduled to replace the older ones to reduce CO2 emissions. This is expected to save Canon Virginia an estimated \$5,000 annually in purchased electricity.

Canon Virginia's Onsite Beekeeping Exhibit

In addition to the aforementioned numerous recycling activities, we also had the chance to observe Canon's environmental stewardship activities. We visited with representatives from the Hampton Honey and Bee Company, a Virginia-based company with 19 beehives on Canon Virginia's property. Honey is routinely collected from these hives, packaged and made available for purchase in the company cafeteria. The company gives informative biodiversity presentations to Canon Virginia employees and to the Newport News community at large. In fact, after visiting with us, the beekeepers were heading out to a local middle school to offer a presentation on their operation to students there.

Assessment

Sustainability is an important initiative across all markets as technology providers seek to provide leading-edge capabilities, while demonstrating a keen sensitivity to the planet we inhabit. Without doing so, we risk potentially devastating circumstances to the earth's long-term prospects.

In the print market, annual sustainability reports are published to highlight the tremendous effort this industry continues to make in its concern for the environment. Over several years, we have witnessed some incredible results coming from such efforts in recycling, energy consumption, and packaging materials to make the provision of print as sustainable as possible.

This message needs constant reinforcement against the headwinds of a society that often looks down at print as a destructive force where environmental initiatives are concerned. Quite to the contrary, manufacturers like Canon have recognized their responsibility to future generations in the use of natural resources and ensuring a sustainable planet. They are to be applauded for their ongoing efforts to recognize this awesome responsibility and to act in a judicious and positive fashion. The accomplishments and milestones made in facilities like Canon Virginia speak for themselves and should be recognized. We look forward to their ongoing efforts to lead toward even greater sustainability contributions in the future.

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