

# **2015 International CES® Green Guide**

## January 2015





## Introduction

Welcome to the 2015 International CES®! The Consumer Electronics Association (CEA)®, owner and producer of the International CES®, continues to expand our recycling, repurposing and greening efforts at this global technology event. CES includes an incredible array of green initiatives as part of our efforts to reduce waste from the event and also give back to the local Las Vegas community.

CEA is proud to present the third annual CES Green Guide. It provides a self-guided tour of several of the show's green companies, showcasing these firms' environmentally friendly products. The guide also highlights CEA's initiatives and the work CEA members are doing to promote energy efficiency and ecycling.

When you get home, be sure to check out **GreenerGadgets.org**, an online, year-round resource for consumers that highlights opportunities for ecycling as well as the industry trend toward "greener gadgets" – smaller, smarter, more energy efficient devices that can do more while using fewer resources. Tech-savvy shoppers now can buy green, live green and recycle responsibly.

For more details on the greening of CES, please go to **CESweb.org/green**.

Enjoy the show!

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## Greening of CES

The International CES® is where the newest innovations are revealed, and it stands as the world's gathering place for all who thrive on the business of consumer technologies. While accomplishing those objectives, CES has also become more environmentally sustainable.

Here are a few highlights from the 2014 International CES:

- More than 48,000 square feet of magnetic banners were recycled
- More than 89,000 square feet of other show graphics were recycled or reused
- More than 74 percent of carpet used during the trade show was reused
- Plastic badge holders were repurposed into hotel room key cards
- Exhibitor press kits are paperless

Along with the greening of show materials, CEA has supported sustainability programs in the City of Las Vegas.

Last year, CEA donated \$10,000 to the University of Nevada, Las Vegas' DesertSol project and \$25,000 to the Springs Preserve. UNLV's DesertSol solar house was the second-place winner, and first among U.S. organizations, at the 2013 U.S. Department of Energy's Solar Decathlon. This donation was to congratulate the UNLV DesertSol team on their success and help further the DesertSol project. CEA's donation to the Springs Preserve assisted in the move of DesertSol to its permanent location in Las Vegas. DesertSol opened to the public in February 2014 and will remain a site for continued research and development of renewable energy for UNLV faculty, students and industry professionals.





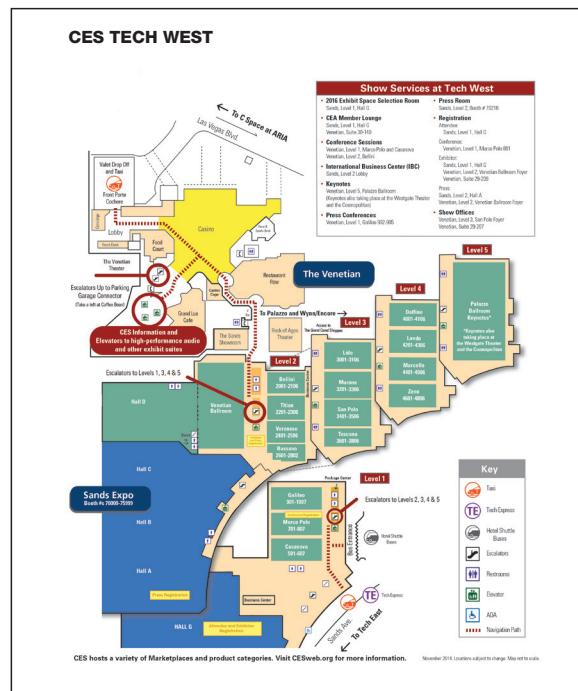
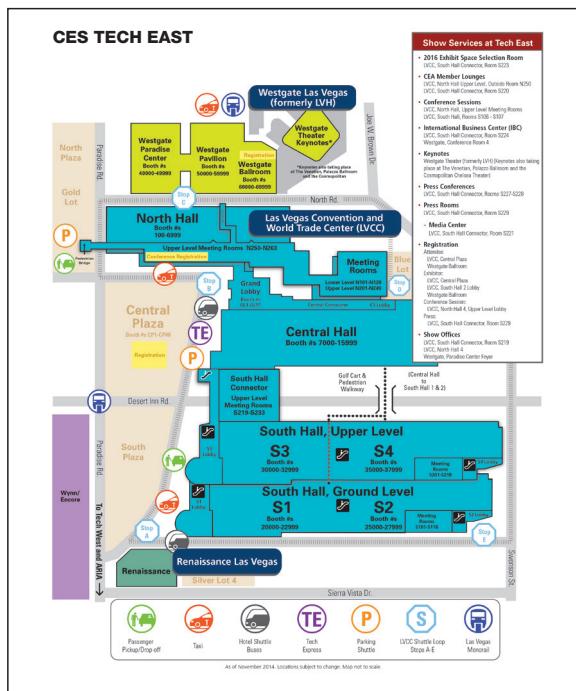
## What's Green to See at CES?

Looking for good examples of green products? There are several locations featuring companies with innovative new products that push the envelope in green design and environmental sustainability. And if you're looking for the next big thing, check out Eureka Park, where one frequently finds startups focused on products and technology that support environmental sustainability.

For new companies looking to gain footing in the consumer electronics (CE) industry, Eureka Park at the 2015 International CES provides startups a unique exhibiting opportunity to launch a new product, service or idea. In partnership with UP Global and the National Science Foundation (NSF), Eureka Park is the premier CES destination where retailers, venture capitalists, manufacturers and other key attendee groups will find budding entrepreneurs, fledgling startups and home grown innovation. Eureka Park is located in the Sands as part of CES Tech West.

The Smart Home Marketplace, located in Tech West at the Sands Expo Center, is another place to find the newest innovations in home energy management and home automation technology. Presented by Bosch, this marketplace is a vibrant showcase of smart appliances, home automation and energy-saving technologies, many of which can be controlled via smartphones, making it easier to maintain energy-efficient and sustainable lifestyles.

# Where to Find Green Companies



LVCC, Central Hall

Canon:

One of Canon U.S.A.'s strongest beliefs is that we have a responsibility to contribute to the welfare of the communities we serve. Canon strives to take an environmentally conscious approach to product design and reduction of impact throughout our products' lifecycle. Canon is showcasing several products that incorporate eco-conscious features, including the new line of MAXIFY devices, which are registered to EPEAT® and incorporate environmental features such as auto duplexing and Quick Start. For more information about Canon's sustainability efforts, please visit <http://usa.canon.com/ecoprograms>.

Location: LVCC, Central Hall – Booth #13106

DISH

DISH offers unique energy-saving solutions for pay-TV subscribers, including an energy efficient set-top receiver - the Joey second room receiver - that delivers DVR functions without an on-board hard drive (and related energy use.) Certified as ENERGY STAR compliant, the Joey is part of the Hopper whole-home DVR system that can record up to eight shows at once – including all network PrimeTime programming, every night. DISH also offers “Virtual Joey” functionality that eliminates the set-top receiver altogether on selected Smart TV products to deliver favorite channels without the need for a separate box. For more information about DISH’s sustainability efforts, please visit <http://careers.dish.com/the-dish-on-dish/community-service>.

Location: LVCC, Central Hall – Booth #8143

**LG Electronics:**

Environmental sustainability is a core business principle at LG Electronics, which will showcase a variety of greener products at the 2015 International CES – headlined by the 2015 CES Innovation Award-winning ENERGY STAR® certified EcoHybrid™ dryer, which uses 50 percent less energy than a conventional electric dryer.

In consumer electronics, among scores of new energy-efficient new products LG will showcase its ENERGY STAR certified OLED TVs, which also are the first to earn the UL Environment GREENGUARD™ certification that sets a new precedent for television manufacturers to help create healthier indoor environments.

Recognizing LG's leadership in energy efficient products and consumer outreach, the company has been named ENERGY STAR Partner of the Year -Sustained Excellence and earned the EPA's coveted 2014 Climate Communications and Emerging Technology awards. For more information about LG's sustainability efforts, please visit [lg.com/us/energy-star](http://lg.com/us/energy-star).

Location: LVCC, Central Hall – Booth #8204

**Panasonic:**

At Panasonic, experience how eco-conscious and smart energy design are helping create “A Better Life, a Better World” through new products for home, school, work, play and when on the move. Come see new electric vehicles powered by Panasonic’s battery and electrification technologies for a cleaner environment and a sustainable future; automotive controls and video/audio systems to keep driving safe and enjoyable; in-flight entertainment and communications systems to speed and ease your journey; a suite of 4K Viera TV, camera and recording products, plus new Technics audio systems, all to engage your lifestyle; plus ingenious new health and beauty products to delight you and your family. For more information about Panasonic’s sustainability efforts, please visit [panasonic.com/global/corporate/sustainability.html](http://panasonic.com/global/corporate/sustainability.html).

Location: LVCC, Central Hall – Booth #9808

**Samsung:**

Samsung, a global leader and award-winning innovator in consumer electronics, semiconductors and telecommunications, is committed to developing environmentally friendly products, promoting responsible electronics recycling and building green manufacturing sites. Samsung is highlighting its innovative eco-conscious technology at the 2015 International CES. For more about Samsung's environmental responsibility efforts, please visit <http://www.samsung.com/us/showcase/environmental-responsibility-through-eco-innovations/>.

Green products include:

- The Samsung Green Memory 64GB 3D TSV DDR4 RDIMM
- The Wi-Fi-enabled Samsung A3050 wall-mounted air conditioner

Location: LVCC, Central Hall – Booth #11906



## LVCC, North Lobby

### ecoATM:

ecoATM is an automated kiosk solution focused on electronics reuse and recycling. State of the art machine vision, USB electrical inspection coupled with robotics allows consumers to claim cash for their old unwanted devices while ensuring those devices don't reach a landfill. ecoATM has collected more than 3 million cell phones, tablets and MP3 players to date. For more information about ecoATM's sustainability efforts, please visit [ecoatm.com/going-green/](http://ecoatm.com/going-green/).

Location: LVCC, North Lobby (NL-2)

## The Venetian

### URC:

URC has been leading control and automation for 25 years, and has delivered 100 million remotes worldwide. We've been green-friendly for years. URC's Z-Wave Gateway provides complete integration between Total Control® automation systems and countless Z-Wave products including locks, lighting, thermostats and more via URC interfaces and mobile apps. URC also introduced compatibility for energy management products including TED, HAI, Aprilaire, Lutron, Vantage, SnapAV Wattbox, and more! For more information about URC's sustainability efforts, please visit [universalremote.com/green\\_home.php](http://universalremote.com/green_home.php).

Location: Venetian Palazzo Hospitality Suites

### Nest:

The Nest Learning Thermostat uses Nest Sense™ (an exclusive combination of sensors and algorithms) to notice when you're away and when you come home. With Auto-Away, the Nest Thermostat turns itself down automatically when you're away to prevent heating or cooling an empty home. Upon your arrival, the Nest Thermostat will return to your regular schedule.

Location: Venetian Palazzo Hospitality Suites

## The Sands Expo

### AMD:

Creating energy-efficient products that power millions of intelligent devices is a key element of AMD innovation, as demonstrated through its recently announced corporate goal to deliver 25 times more energy efficiency in its accelerated processing units (APUs) by the year 2020. An example of this commitment is the AMD 2014 Low-Power Mobile APUs (codenamed "Mullins"). Designed for energy efficient tablets and laptops, the "Mullins" APUs feature 2x the graphics performance-per-watt versus the previous generation. For more information about AMD's sustainability efforts, please visit [www.amd.com/en-us/innovations/software-technologies/25x20](http://www.amd.com/en-us/innovations/software-technologies/25x20).

Location: The Sands Expo – San Palo Meeting Rooms 3402, 3403, 3404

### Lowe's:

Monitor and maintain your home from your computer, tablet or smartphone with Lowe's home management system called Iris. Iris adjusts the lights, controls the climate, manages the security system, and even locks and unlocks doors.

Location: The Sands Expo – Booth #70632



## CEA and Energy Efficiency

The consumer electronics industry is leading the way on energy efficiency. Our industry's environmental footprint continues to shrink due to consumer-friendly innovations resulting in lighter, thinner and more energy-efficient products.

A recent major study finds the share of household electricity use by such devices has declined even while the number of consumer electronics in the typical household has increased. In fact, consumer electronics in 2013 accounted for a lower percentage of electricity usage per household than they did three years earlier, according to CEA's *Energy Consumption of Consumer Electronics in U.S. Homes in 2013*.

Consumer electronics also are among the least costly energy-using products in the home. For example, in dollar terms, it costs only \$12.87 a year on average to power a Blu-ray player and \$15.49 to power a videogame console – compared to \$329.01 for central heating and air.

We all need to play a part in understanding our use of energy. CEA supported the U.S. Federal Trade Commission's development of an EnergyGuide label for TVs to inform consumers shopping for new TVs. In addition, CEA developed a consumer electronics energy calculator on GreenerGadgets.org. The energy calculator estimates the amount of energy home electronics consume, based on the type of device and the usage pattern. The calculator determines the energy cost per month and per year, and compares your energy use to that of the average U.S. household. While consumer electronics in the U.S. account for 12 percent of an average home's energy use, every little bit of saved energy translates into dollar savings and reduced energy demand. Studies find that the more consumers understand their energy use, the less energy they're likely to consume.

To support energy efficiency policies and programs, there must be standard methods of measuring energy use. CEA has made significant contributions to the development of consensus standard test procedures for measuring power consumption in consumer electronics, notably for televisions, set-top boxes and network equipment such as routers and modems.

### Greener Set-Top Boxes Save Money

Welcome to the era of green electronics, where many products and systems are geared towards energy efficiency, resulting in gains for consumers' wallets. One of the most innovative approaches to advancing energy efficiency in the U.S. involves service providers, manufacturers and energy efficiency advocates working together to voluntarily reduce power consumption in pay-TV set-top boxes under a novel voluntary agreement.

In 2012, the pay-TV industry initiated a voluntary agreement that would eventually result in annual electricity savings of \$1 billion or more, as the energy efficiency of set-top boxes is increased by up to 45 percent. Agreement signatories include 11 cable, satellite, and telco video companies and all major equipment vendors serving 91.9 million U.S. video subscribers, accounting for 91.3 percent of the total market in 2013. In 2013, leading energy-efficiency advocates joined with the pay-TV industry in an expanded version of the voluntary agreement.

A report last year shows that this voluntary set-top box energy conservation agreement has saved American consumers approximately \$168 million in energy bills. According to the *Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Set-Top Boxes 2013 Annual Report*, the improved energy efficiency of set-top boxes also represents a savings of nearly 842,000 metric tons of carbon dioxide (CO<sub>2</sub>) per year. This is equivalent to the output of one-half of a large (500MW) power plant. As noted in the report, the voluntary agreement led to a 4.4 percent reduction in national energy consumption by set-top boxes even as deployed stock increased in 2013.

More information can be found at [CE.org/energy](http://CE.org/energy).



## CEA and ecycling

Our industry is making strong contributions to support responsible recycling of CE products through the eCycling Leadership Initiative. The initiative seeks to improve consumer awareness of the more than 8,000 collection sites currently sponsored by the industry; increase the amount of electronics recycled responsibly; increase the number of collection opportunities available; and provide transparent metrics on recycling efforts.

In 2013, our industry recycled more than 620 million pounds of consumer electronics. That total is an increase of 320 million pounds since we started in 2010, putting us well on our way to the Billion Pound Challenge stretch goal.

One long-term goal of our industry is for consumers to recycle electronics easily and CEA's GreenerGadgets.org is a major step towards that vision. The site features a recycling locator tool, where consumers can search for nearby electronics recycling locations, including retailers such as Best Buy and Staples, local government sites and other recycling drop off locations sponsored by consumer electronics manufacturers and retailers. With 82 percent of consumers saying recycling their old electronics is important or very important to them, according to the *Recycling and Reuse Study, 2014 Edition*, GreenerGadgets.org is a great resource for consumers.

And there's more. Following a successful radio public service announcement that was heard by an estimated 70 million people in 2013, in 2014 CEA produced an ecycling television public service announcement that aired on stations across the country. CEA also partnered with Young Minds Inspired to produce free lesson plans for teachers to educate over a million students and more than 33,000 educators about recycling.

As CE companies ramp up recycling-related activities in 2015 and beyond, CEA will continue outreach efforts to consumers about where they can recycle their old electronics responsibly.

More information can be found at [CE.org/ecycle](http://CE.org/ecycle).

