2017 CES Green Guide

Environmentally-friendly products at your fingertips.
Welcome

The Consumer Technology Association (CTA)™ is proud to present the fifth annual CES Green Guide. It provides a self-guided tour of a collection of the CES 2017 green companies and showcases these organizations’ environmentally-friendly products. The guide also highlights CTA’s initiatives and the work its members are doing to promote energy efficiency, ecycling and sustainable materials management.

CTA is the owner and producer of CES®, the world’s gathering place for innovators and breakthrough technologies for 50 years. The positive sustainability impact of CES, through its operations and the companies and solutions it spotlights, is vast and global - helping to establish CES as “North America’s Greenest Show” by Tradeshow Executive Magazine. CTA continues to expand its sustainability efforts at CES 2017 with a broad array of green initiatives helping to reduce waste, repurpose materials and give back to the local Las Vegas community.

After the show be sure to check out GreenerGadgets.org, an online resource for consumers that highlights ecycling opportunities and the industry’s overall trend toward “greener gadgets” – smaller, smarter, more energy-efficient devices. Let GreenerGadgets.org help you to buy green, live green and recycle responsibly all year long.
Greening of CES

CES is the world’s gathering place for all who thrive on the business of consumer technologies – helping companies big and small from a wide array of industries introduce the latest innovations to the global market. While accomplishing these objectives, CES and the consumer technology industry have also become more environmentally sustainable.

Here are a few highlights from CES 2016:

- Over **one million** square feet of carpet were reused and 330,000 square feet were recycled by our general contractor Freeman.
- Only paperless press kits are permitted in CES Press Rooms, saving an estimated **2.5 million** pages of printed paper.
- CTA donated $14,000 to Green Our Planet to support the Outdoor Garden Classroom program in Las Vegas schools, teaching over 10,000 students about environmental issues and providing them with healthy food.
- At CES 2016 more than **4.8 tons** of steel and 3,000 pounds of aluminum were melted down and recycled.
- Since 2011, CTA has given **$200,000** to Green Chips to support solar-powered initiatives in Las Vegas, including transforming the iconic “Welcome to Fabulous Las Vegas” sign into a solar-powered masterpiece.
- Since 2009, CTA has donated nearly **$600,000** to sustainability and educational initiatives in the Las Vegas community.

For a complete rundown on how CES is becoming more sustainable every year, visit CES.tech/Green.
Environmental sustainability is a core business principle at LG Electronics, which is showcasing a number of greener products at CES® 2017 – headlined by ENERGY STAR® certified 4K Ultra HD TVs, refrigerators, washing machines, clothes dryers and more. A highlight of CES 2017 is a super-efficient LG 4K UHD TV honored with the 2017 CES Innovations Award for Eco-Design and Sustainable Technologies. LG Electronics is a proud ENERGY STAR® Partner of the Year-Sustained Excellence.

LG’s sustainability focus at CES 2017 builds on the company being named Industry Group Leader by the Dow Jones Sustainability Indices, ranked among the Global 100 Most Sustainable Corporations by Corporate Knights, and having achieved Gold Class distinction in RobecoSAM’s Sustainability Yearbook. Also noteworthy is LG’s leadership in product stewardship underscored by the Gold Tier Award, the top-level recognition in the Environmental Protection Agency’s electronics recycling challenge.
BITS Limited, inventor of the Smart Strip® APS introduces the Eco-Logical™ line of CSA/Water Sense® approved shower heads and aerators. Included are air-filter whistles, PTFE tape, door-sweeps and temperature cards with optional custom imprint (just like our night-lights).

Also new from BITS Limited are dimming and non-dimming A-19 800 lumen LED BITS Bulbs™ packaged for inclusion in utility kits. BITS is now a one-stop-shop for distributors looking to complete kits or rebate-eligible energy/water saving items.
“Future Smart” brings together the multiple spaces that connect today’s consumers and support a greener future. From Future Lifestyles to Mobility and Business Spaces, Panasonic is integrating smart, sustainable technologies and products to make “A Better Life, A Better World.” Our Mobility Solutions promote more sustainable communities, enable efficient vehicles and transportation systems, and provide global in-flight connectivity. Panasonic’s Lifestyle Spaces demonstrate intelligent and energy-efficient home and entertainment technologies. And the company’s Business Spaces provide a more personal and engaging shopping experience and a powerful, immersive sports viewing experience. Panasonic’s technology advances are also on full display in the Innovations Hub, including sensors, robotics and IoT-related systems, which are providing eco-conscious living while complementing comfortable lifestyles.
Headquartered in Ridgefield Park, NJ, Samsung Electronics America, Inc. (SEA) is a recognized innovative leader in consumer electronics, mobile devices and enterprise solutions. A wholly owned subsidiary of Samsung Electronics Co., Ltd., SEA is pushing beyond the limits of today’s technology and providing consumers and organizations with a portfolio of groundbreaking products in appliances, home entertainment, Internet of Things, mobile computing, smartphones, virtual reality, wireless infrastructure and wearables, in addition to offering leading content and services related to mobile payments, 360-degree VR video, customer support and more. Samsung is a pioneering leader in smartphones and HDTVs in the U.S., and one of America’s fastest-growing home appliance brands.

Energy efficiency is a core value for Samsung, both in its products and its manufacturing processes. By continuously improving its products’ energy efficiency, Samsung aims to achieve a reduction of 250 million tons of product-use GHG emissions from 2009 to 2020. In 2015 alone, Samsung reduced approximately 33 million tons of GHG emissions. As a result of these efforts, the Environmental Protection Agency has recognized Samsung with ENERGY STAR Awards every year since 2009, including Partner of the Year–Product Manufacturer Award in 2011 and 2012 and Partner of the Year – Sustained Excellence Award 2013 through 2016.
Sony’s “Road to Zero” global environmental plan targets a zero environmental footprint for its products and business activities by the year 2050. Since fiscal 2008, Sony has reduced product energy use by 33 percent and product mass by 30%. By fiscal 2020 Sony is targeting additional energy use reduction of 30% for AC powered devices and virgin plastic usage reduction of 10% per product compared to fiscal 2013.

Learn more by visiting www.sony.net/eco.
Uzer Sands, Halls G – Booth #50416

Eugene (by Uzer) is the first smart trash can that makes home recycling a fun, rewarding, and convenient routine. A simple scan of your packaging’s barcode with Eugene allows you to improve your home recycling and get rewarded for it, monitor and analyze your consumption (quantities, ingredients, allergens) and prepare smart shopping lists to easily send to your regular online retailer.

Best Buy

Best Buy aims to help customers live more sustainable lives by offering a wide assortment of energy-saving products. This includes offering a large selection of ENERGY STAR® certified products and featuring Smart Home products such as smart thermostats, water-saving devices, residential solar and LED lighting. Best Buy is also using less energy in its operations and has pledged to reduce its carbon footprint by 45 percent by 2020.
Giving Back Announcement  
**Wednesday, January 4th, 3:00-3:30 PM**  
LVCC, Grand Lobby, Consumer Technology Stage  
Each year, CTA provides grants to local Las Vegas organizations with sustainability initiatives. We look for innovative programs that give back to the local community, help take care of our planet and make the world a better place. This year’s grant recipients will be announced during the CES 50th Anniversary Celebration.

EPA SMM Electronics Challenge Awards Ceremony  
**Saturday, January 7, 10:00-10:30 AM**  
LVCC, Grand Lobby, Consumer Technology Stage  
The Office of Land and Emergency Management at the Environmental Protection Agency will recognize companies who have achieved excellence in the Sustainable Materials Management (SMM) Electronics Challenge. This effort encourages manufacturers, brand owners and retailers to strive to send 100 percent of used electronics collected to third-party certified electronics refurbishers and recyclers.

Sports, Technology and Sustainability  
**Saturday, January 7, 10:00-10:45 AM**  
Sands, Level 2, Hall D, Booth #45045  
Sports are a unique driver in raising awareness for environmental sustainability. This panel will focus on how the sports industry is creating awareness and finding innovating technologies to benefit the planet.

New RIT Electronics Materials Baseline  
**Presented by RIT, Staples, CTA**  
**Saturday, January 7, 10:30- 11:00 AM**  
LVCC, Grand Lobby, Consumer Technology Stage  
The Rochester Institute of Technology’s Golisano Institute for Sustainability will release the initial results of a comprehensive materials baseline study for all consumer electronics sold into the U.S. market for the past 25 years. Important findings and trends will be discussed.

Sustainability Issues for a New Administration/Congress: Can Sustainably Pay in Tech?  
**Saturday, January 7, 1:00-2:00 PM**  
LVCC, North Hall, Room N254  
Will the sharing economy lead to sustainable consumption in an economy powered by consumer technology? Can innovation lead the global economy toward growth, while reducing humanity’s environmental footprint? Panelists from tech companies, academia and government will discuss emerging sustainability issues.
The consumer technology industry is leading the way on energy efficiency. Our devices have become smaller, smarter and lighter - using less energy than they did just a few years ago. According to *CTA’s Energy Consumption of Consumer Electronics in U.S. Homes in 2013*, consumer tech products account for only about 12 percent of our home energy use, even as the number of devices in our homes has grown. In fact, it costs only $20.12 on average – less than six cents a day – to power a television, and $6.42 to power a laptop for an entire year, compared to $329.01 for central heating and air.

Emerging technologies such as the Internet of Things (IoT) are helping change the way households consume and save energy. A recent study conducted by CTA, *The Energy Savings Potential of Home Automation Technology*, found that IoT and home automation have the potential to reduce annual energy use in U.S. households by as much as 10 percent - more than consumer technologies’ share of total residential primary energy consumption (8.4 percent) according to a separate *CTA study*. 
In 2012, the pay-TV industry, working with energy efficiency advocates, initiated a voluntary agreement that will result in annual electricity savings of $1 billion or more by increasing the energy efficiency of set-top boxes by as much as 45 percent. As a 2015 report shows, in less than three years these voluntary efforts had already saved American consumers more than $645 million in energy bills and avoided 3.6 million metric tons of carbon dioxide (CO2) emissions. Agreement signatories include 11 cable, satellite and telco video companies and all major equipment vendors – serving 91.9 million U.S. video subscribers and accounting for 91.3 percent of the total market in 2013.

In 2015, internet service providers, equipment suppliers and retail equipment manufacturers launched a significant voluntary agreement in the U.S. to improve the energy efficiency of home internet equipment – primarily modems and routers – by 10 to 20 percent. The agreement sets rigorous standards that will cover more than 90 percent of U.S. broadband households – roughly 80 million homes. Earlier this year, the first annual report found that nearly 90 percent of home internet equipment purchased and sold in the U.S. in 2015 met the new, higher energy efficiency standards.
Small Network Equipment Voluntary Agreement
Percentage of Units Meeting Energy Efficiency Standards, by Equipment Type:

- Broadband Modem
- Integrated Access Device
- Local Network Equipment
- Total

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The consumer technology industry has taken direct steps to reduce its impact on the environment by creating smarter products with less material and providing easier ways for consumers to recycle their older devices. The results have been profound: consumer electronics recycling is increasing faster than that of any other product stream in the United States, according to the Environmental Protection Agency (EPA).

In 2011, CTA launched the eCycling Leadership Initiative (ELI), a collaboration of manufacturers, retailers, collectors, recyclers, non-governmental organizations and governments at all levels. The initiative’s key goals are to:

- Improve consumer awareness of the available ecycling collection sites sponsored by the industry.
- Increase the amount of electronics recycled responsibly.
- Increase the number of collection opportunities available to consumers.
- Provide transparent metrics on ecycling efforts.
Last year, the industry announced that a record 700 million pounds of consumer electronics were recycled across the U.S. by manufacturers and retailers in 2015 – 40 million pounds more than 2014 and more than twice the amount recycled in 2010.

Improvements in product packaging have also been integral in reducing the industry’s overall environmental impact. Manufacturers and retailers recognize that environmentally responsible packaging represents an effective opportunity to reduce waste by limiting the use of natural resources and cutting emissions – while also lowering costs. That’s why many manufacturers and distributors take a deliberately innovative approach to their packaging design choices – decisions that not only get products to consumers undamaged but also reduce size and weight, increase the amount of renewable content and enhance the recyclability and compostability of boxes, cushions, bags and other materials.
As innovation pushes consumer devices to be more energy efficient and use less material resources, the consumer technology industry is pioneering a contrarian model of industry growth + reduced environmental impact. As technology has enabled a remarkable amount of economic activity beyond the traditional model of materials-focused consumption, CTA and its partners are working to quantify industry environmental challenges, achievements and impacts that could potentially lead to a replicable model for other industries to follow. And at CES 2017, you can see it unfolding before your own eyes.

For more information go to www.cta.tech/green