



# SMART HOME

GREEN + WIRED



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**David Mosena**  
Museum of Science  
and Industry

Dear Friends,

The Museum of Science and Industry, Chicago opened its doors in 1933. That same year, Chicago hosted a spectacular celebration of human innovation: The Century of Progress World's Fair. I read about one exhibit from that fair that has always fascinated me. The "Homes of Tomorrow" display unveiled visionary building methods and technologies like prefabricated homes and solar-powered heating.

Today, green practices lead modern industry. It is our ongoing mission to provide our guests with information about these practices and relevant, hands-on experiences. Students build model fuel cell cars in Museum learning labs, and teachers learn how to present alternative energy content in their classrooms. As a tribute to environmentally aware science education, it seems only fitting to showcase scientific and industrial innovations, new materials and technologies shaping the homes of our future.

When we decided to showcase the future of eco-friendly architecture, only a real home demonstrating the cutting-edge in green technology and sustainable materials would do! We contacted architect Michelle Kaufmann, one of the country's most innovative designers of sustainable green homes, and All-American Homes®, an industry leader in superior modular home construction, and we knew we had the blueprint for an extraordinary exhibit experience: a real, fully functioning eco-home right here at the Museum.

Since its opening in 2008, we have been honored to host more than 250,000 guests in the 2,500-square-foot *Smart Home: Green + Wired* exhibition, featuring recycled and renewed materials and the latest in smart technology and energy efficiency. This year, with the help of our friends and Scout and Gizmodo, the *Smart Home* highlights new green stories, current and future home technologies, and eco-friendly products and furniture. You're invited to tour the three-story home and journey through the *Smart Park*, which offers techniques for urban gardening, including water features and raised bed gardening.

Welcome to Chicago's Greenest Home. Welcome to living green and living smart.

David R. Mosena  
President and CEO  
Museum of Science and Industry, Chicago

# MICHELLE KAUFMANN'S FIVE ECO-PRINCIPLES

Michelle Kaufmann, architect of the *Smart Home*, identified five key principles that guide decisions regarding the home's design, construction and day-to-day operation. These ideals, incorporated throughout the home, demonstrate sustainability and environmental conscientiousness in action:



## 1. Smart Design

Designed to "let the green in," the home was built to human scale, using only what is needed, but remaining open and airy. High ceilings, warm materials, clean lines and abundant light and breezes make the home feel even more spacious. A full-home, automated smart technology system enables homeowners to control heat, window coverings, lighting, and cameras, as well as track utility consumption in real-time.



## 2. Material Efficiency

The *Smart Home* was prefabricated, built in modules off-site. Crafted in a controlled indoor environment, the construction timeline was shortened and less energy and fewer resources were used versus the construction of a traditional home. Materials used are renewable or recycled: bamboo flooring, Forest Stewardship Council (FSC) certified wood and recycled glass tiles are a few of the low-impact choices.



## 3. Energy Efficiency

Throughout the home, materials and technology help save energy. The green roof helps insulate, absorb rainwater and minimize runoff. Huge windows, sliding doors and sunshades help light, heat and cool the house. Solar rooftop panels and a wind turbine generate much of the home's electricity. ENERGY STAR appliances and an array of energy-efficient technologies help save energy as well.



## 4. Water Efficiency

Water is the Earth's most precious resource, yet in traditional homes, more than one-quarter of drinking water is used to flush toilets! *Smart Home* features an array of water-efficient technologies and appliances, such as low-flow shower heads and dual-flush toilets that generally use less than a gallon of water each flush. Rainwater and "grey water" (rinse water from the clothes washer, shower, etc.) are used in toilets and to water outdoor landscapes.



## 5. Healthy Environment

Healthy environments by using non-toxic materials: no- or low-volatile organic compounds (VOCs) paints; air filtration and purification systems; and spray-in foam insulation, which is more effective than fiberglass batting and minimizes mold. A healthy environment continues outside the home with water recycling systems, native plants that adapt to climate conditions, permeable paving materials and more.

photo: Garee Curtis



**Michelle Kaufmann**  
Architect of the *Smart Home*  
michellekaufmann.com



# PRE-FABULOUS

All American Homes® is an expert and industry leader in residential and commercial modular (systems-built) construction. When a home is built on site, architects, contractors and builders must contend with delays because of weather, and wasted materials, among other obstacles. Realizing that pre-built components made construction more efficient and affordable, pioneers in the home-building industry followed the precedent of the automotive industry. Homes built in factories instead of on site save time, energy and materials. | [allamericanhomes.com](http://allamericanhomes.com)



## What is a modular home?

A modular home is comprised of complex “modules,” built off-site in a climate-controlled environment. These highly engineered components are built in a factory and transported to the building site where they are set onto a permanent foundation. Like traditional homes, modular homes must pass the same code requirements. Modular homes can be fully customized to meet the homeowner’s preferences and needs.

## Why choose prefab over site built?

- Typical on-site construction jobs do not have provisions for materials storage and most materials have to be cut to length in the field, so “cut offs” are often trashed. Modular, factory construction saves time and materials. Wood is delivered pre-cut for many components and computerized saws do the rest. Cut offs from framing are used for blocking or to heat the factory or employees’ homes. Drywall, wiring, sawdust, vinyl and other scraps are also collected and recycled.
- A home can be completed in several weeks in the factory, and finished on site in three-to-eight weeks. A site-built home of similar size could take four months or longer.
- Modular homes are constructed from the inside out. That means electricians and plumbers have easy access into the walls during construction.
- Homes built in the factory are not subject to Mother Nature’s whims. Production continues despite snow, rain, sleet and heat.



# GO GREEN, SAVE GREEN!

ComEd offers customers many options to help shrink their bills—and their carbon footprints!

- Sign up for ComEd’s Appliance Recycling program. Old fridge in the garage or basement? Get paid \$25 to have it picked up. ComEd will even ensure it’s recycled in an environmentally-responsible way.
- Use ComEd’s Home Energy Analysis Tool for customized energy-saving tips for your home.
- Visit [ComEd.com](http://ComEd.com) for more details about the programs mentioned above and to learn more tips, tricks, and tools to help go green and save green.

# ENERGY

The *Smart Home* produces solar and wind energy to help reduce its dependence on fossil fuel power. When more energy is produced than needed, it is sent to the Museum’s main grid to be used to power your favorite exhibits!

**Photovoltaic Film** | Gift of: Uni-Solar | [uni-solar.com](http://uni-solar.com) | Thin photovoltaic film absorbs the sun’s power and transforms it into usable energy.

**Wind Turbine** | Gift of: Southwest Windpower | [skystreamenergy.com](http://skystreamenergy.com) | Harnesses the wind and turns it into electric energy for the home.



# SMART RENOVATIONS

After four years and more than half a million feet, the *Smart Home* enjoyed some R+R (Remodeling and Renovating). The Museum is grateful to the following for their generous support.

**Doherty Design Group** | [dohertydesigngroup.com](http://dohertydesigngroup.com) | Provided oversight and brought together home automation partners to make the *Smart Home* smarter than ever.

**Goldberg General Construction** | [ggcinc.net](http://ggcinc.net) | Provided labor and management for the kitchen and master bathroom renovations, exterior Ipê cleaning and oiling and transformed bookcases into open storage cases.

**A S Painting and Decorating** | [aspaintingdecorating.com](http://aspaintingdecorating.com) | Patched and painted the interior of the *Smart Home*, floor-to-ceiling, with a fresh coat of Benjamin Moore’s No-VOC Natura paint.

**The Fine Line** | [finelinetile.com](http://finelinetile.com) | Oversaw the design and selection of eco-friendly materials to give our master bathroom a fresh new look.

**Geek Squad** | [geeksquad.com](http://geeksquad.com) | Provided home automation and A/V installation services.



Scout  
scoutchicago.com

## INTERIORS BY SCOUT

The *Smart Home*, redesigned by Chicago home interior store Scout and its owner Larry Vodak, boasts an interior filled with unique objects that have been given second life. As the *Smart Home's* interior doesn't rely on newly-made items, but rather vintage and "gently used" finds, the space that was ultimately created is environmentally friendly and full of character. Examples include University of Chicago laboratory cabinets, circa the late 1940s, that have been refurbished to serve as elegant and sophisticated kitchen cabinetry. A large utilitarian storage cabinet—that spent more than 50 years in a U.S. Post office in Springfield, Ill.—is used for a one-of-a-kind platform for the most modern of flat screen

TVs. Office furniture from Bodine Electric Co. is transformed into bathroom vanities. As well, an otherwise common steel dresser taken from a motel on Chicago's South Side has been carefully stripped of 60-year-old paint, revealing a very contemporary steel-grey finish.

"Since Scout's opening almost seven years ago, we have been singularly devoted to finding and refurbishing select pieces from offices, schools, universities, courthouses and libraries—and then working on their scale, finish and functionality to give them new life in today's homes," said Larry Vodak, "The goal with the *Smart Home* is to add these kind of special pieces and create a space that's more functional, more interesting and more memorable—bringing together that unique mix of items that bring a clean, timeless utility; an urban freshness; and as well as a second-hand comfort and warmth."

The magic of the home comes in the special mix of old and new and in drawing inspiration from others who share passion for soulful, gently used items. A team of talented individuals and businesses made the transformations in the home possible, and we thank "Team Scout" for their generosity and expertise.

**Furniture Revival** |  
chicagofurniturerevival.com | This company specializes in the restoration of wood and metal furniture, and Scout uses them exclusively to make the Scout look come together.

**Nicholas Moriarty Interiors** |  
nm-interiors.com | This firm focuses on the unique appeal of unlikely combinations to create interiors that retain a warm and livable aesthetic.

**Ted Harris Lamps** | tedharrislamps.com | Ted Harris offers unique lighting fixtures that incorporate salvaged items; he has been featured in countless articles, publications and TV shows.

**Oscar Isberian Rugs** | isberian.com | Oscar Isberian's rugs often surprise and inspire and always work brilliantly to bring everything together in the smartly tailored home.

**Comfort Upholstery** | comfortupholstery.com | Offers a unique approach to classic mid-century, modern furniture design. With two generations of experience, Comfort Upholstery provides the best fabrics and the smartest solutions to each and every piece.

## GADGETS BY GIZMODO

### What makes a home smart?

With a genius-level IQ, the home automation system monitors and manages the energy consumption of every room from a single touch screen panel. It multitasks, acting as a media server that can dispatch different songs throughout the house simultaneously through booming speakers that disappear into the ceiling.

A master organizer, it also functions as a digital dashboard—keeping your entire family's messages, calendars and photos together on one screen. But most of all, a *Smart Home* is one that you don't have to think about ...

### The Smartest Home on the Block

Because home automation takes care of keeping the *Smart Home* clean and green, homeowners get plenty of time left to enjoy its technological treats.

The Cyberecture Mirror on the wall may be fog-resistant and waterproof, sure. But it also adjusts the lighting for easy makeup application, keeps track of weight gain or loss, and connects to friends on Facebook. Snow White's wicked witch never had it so good! And for a little bit of competitive

gadgets, see how many of the Rubik's Slide's 10,000 puzzles you can unlock.

The best technology doesn't just simplify our lives; it beautifies as well. Herman Miller's Leaf Personal Light offers cutting-edge touch controls, while enhancing the home office aesthetic with smooth, clean lines. And form and function don't balance any better than in Fiskars Cuts+More, a bottle-opening, hole-piercing, box-shredding, Voltron of utility.

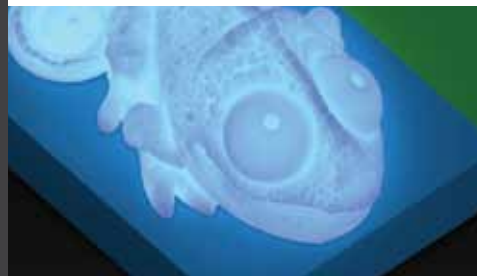
Lamps, lights, scissors—in the *Smart Home*, *everything* is familiar ... but highly intelligent and evolved. Even a simple drink of water in the kitchen achieves green nirvana with the Bamboo Water Bottle: reusable, green, gorgeous. Likewise the OAT biodegradable shoes are the prettiest kicks a compost heap has ever seen.

And that's just for the grownups. Take a walk over to the boy's room and you'll find science experiments masquerading as toys, and toys imported from the future. The iPhone-powered AR.Drone is his own private Air Force, while the Celestron smart telescope can identify more than 4,000 celestial bodies all on its own.

### About Technology Partner, Gizmodo

Gizmodo is ecstatic to present the evolution of the house as you know it, taking the everyday items that we all take for granted and shining new (LED) light on them. That's not just progress. That's smart. **gizmodo.com**

photos: courtesy of Scout (left) and Gizmodo (right)



# PRODUCTS THROUGHOUT SMART HOME

Join us on a tour of the *Smart Home*. Highlighted are some of the products, materials, furnishings, appliances and technologies that made the exhibit possible. For additional products and resources visit [msichicago.org/smarthome](http://msichicago.org/smarthome).

**Home Renovations** | Gift of: Goldberg General Construction | [ggcinc.net](http://ggcinc.net) | All materials used in the renovations were sourced as sustainable and ecological to the environment, including recycled materials, low-VOC oils and natural materials.

**Sivoia QED Automated Shading System** | Gift of: Lutron | [lutron.com](http://lutron.com) | Shade system automates a home's window treatments, allowing one button to control every light and window treatment in a home.

**Recessed LED Light Fixtures** | Gift of: Progress® Lighting | [progresslighting.com](http://progresslighting.com) | Energy-efficient LED which can last 30,000 to 50,000 hours, as compared to incandescent bulbs' 800 to 1,000.

**Interior Paint** | Benjamin Moore Natura™ Paint | Gift of: Benjamin Moore | [benjaminmoore.com/natura](http://benjaminmoore.com/natura) | Zero-VOC premium paint available in thousands of colors and exceeds LEED and Green Seal GS-11 standards.

**Heating, Ventilation and Air Conditioning** | QuietAir High Velocity Air Handler and Insulated Duct | Gift of: z Comfort Pro Systems | [comfortprosystems.com](http://comfortprosystems.com) | These systems use narrower ducts than traditional forced-air systems, which makes the air flow from vents faster and thus heats or cools a room in less time.

**Windows, Doors and Skylights** | Designer Series and motorized skylights | Gift of: Pella Windows and Doors, Inc. | [pella.com](http://pella.com) | Energy-efficient window and motorized skylight placement optimizes natural lighting and ventilation for the home, minimizing the need for artificial light and air conditioning. Dual-panel, Low-E glass can save 10 to 25 percent of heating and air conditioning from leaking.

**Heated Radiant Subfloor** | Gift of: Warmboard Inc. | [warmboard.com](http://warmboard.com) | The high-conductivity of Warmboard leads to lower water temperatures and heats the room from the floor up; both lead to greater energy efficiency.

**Home Insulation** | Spray-in place formula | Gift of: the Icynene Insulation System® | [icynene.com](http://icynene.com) | Reduces energy consumption by up to 50 percent, does not off-gas and eliminates or reduces other construction materials. Minimizes mold, exceeds the American Lung Association criteria for a healthy home.

**Stair Railing** | Cable rail™ | Gift of: Feeney Architectural Products | [feeneyarchitectural.com](http://feeneyarchitectural.com), [cablerail.com](http://cablerail.com)

**Roof Sheathing** | Gift of: Barrier Technology Company | [intlbarrier.com](http://intlbarrier.com)

**Roof Membrane** | Gift of: MuleHide | [mulehide.com](http://mulehide.com) | Light colored membranes reflect sunlight and cool building interior for energy savings.



**Exterior Wrap** | WallShield® | Gift of: Vapro Shield | vaprosshield.com | The most weather-resistant rain screen on the market, which makes it best for reducing the risk of mold, mildew and rot.  
**Exterior Wood Siding** | Gift of: Iron Woods | ironwoods.com | FSC-certified Ipê | Ipê wood is long-lasting and requires minimal maintenance.

**Exterior Cement Siding** | Gift of: Cembonit | cbf11.com | Cement is a “green” material, plus the color is integrated into the material, rather than needing paint applied (long-lasting and low-maintenance).

**Fire Protection Sprinkler System** | Gift of: Northern Illinois Fire Sprinkler Advisory Board | homefiresprinkler.org | Installed by: Great Lakes Plumbing and Heating.

**Large Opening Glass Walls** | Gift of: NanaWall® | nanawall.com | The weather-tight, energy-efficient system exceeds industry standards for air infiltration, water penetration, structural and thermal performance and forced entry. Pocket doors open up the walls, extending the sense of space.

**Stackable Axxis® Laundry** | Gift of: BSH Home Appliances Corporation | bosch-home.com/us | Maximizes space and can be installed anywhere since it does not require any ducting or venting.

**UV Stain for Exterior Ipê** | Gift of: Mesmmers | messmers.com

**Michael McGuire Artwork** | Scout Find | Using one archival pen, the artist crosshatches landscapes, until the ink runs out.

**Bamboo Flooring** | SYNERGY Prefinished Strand Bamboo Flooring, Color: Java | Gift of: Teragren® commercial and All Tile, Inc. | teragren.com | alltile.com | Highly-renewable material that grows quickly, capable of growing more than 90 feet in just a year.

# FIRST FLOOR

## KITCHEN

**Light Switches and Outlets** | Gift of: Trufig | danainnovations.com | Eliminates wall clutter by offering consistency of color, design and finish.

**Sonance Visual Performance Speakers** | Gift of: Dana Innovations | danainnovations.com | Visual Performance Series speakers combine elegant, modern style with outstanding audio performance.

**Elo Touch 19” Touch Panel** | Gift of: Best Buy | bestbuy.com | This compact touch monitor is “designed for touch” with proven expertise and reliability built-in.

**Steel Kitchen Cabinets** | Scout Find | Science cabinets rescued from the University of Chicago and refinished by Furniture Revival.

**Squak Mountain Stone Countertops** | Gift of: Green Home Chicago Design Center | Color: Thunder | ghcdesigncenter.com | Made of mixed waste paper, recycled glass and low carbon cement. Over 50 percent post-consumer recycled content.

**Crestwood Kitchen Cabinets** | Oak veneer | Gift of: McNulty Design Group, Inc. | mcnultydesign.net | Made from FSC-certified wood, no-VOC wood sealant and formaldehyde-free particleboard substrates. Painted with Natura paint.

**Integra® Built-In Refrigerator** | Gift of: BSH Home Appliances Corporation | bosch-home.com/us | ENERGY STAR rated with an energy mode and vacation mode to conserve energy.

**Induction Cooktop** | Gift of: BSH Home Appliances Corporation | bosch-home.com/us | Fast and efficient cooking technology.

**Kitchen Sink and Karbon Faucet** | Gift of: Kohler | kohler.com.

**Built-In Wall Oven** | Gift of: BSH Home Appliances Corporation | bosch-home.com/us | Speed convection saves 30 percent of cooking time.

**Tabletop Composter** | Gift of: NatureMill | naturemill.com | Recycles its weight in waste every 10 days, diverting more than two tons of waste from landfills over its life.

## DINING ROOM

**Life Table** | Scout Find | Created by Furniture Revival from salvaged planks.

**Steel Stools** | Scout Find | Salvaged from a manufacturing plant in Minneapolis; stripped and buffed to the original steel.

**Chandeliers** | Loaned by: Ted Harris | tedharrisamps.com | Made from old CFL tubes.

**Vintage Trough** | Scout Find | Filled with moss to create a natural centerpiece.

**Artwork by Michael Nicholson** | Scout Find | Repurposed bicycle tire inner tubes, hand stretched into collectible works of art.

## LOUNGE

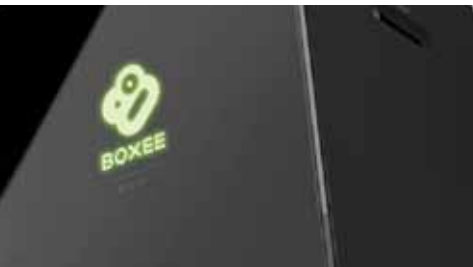
**Patchwork Kilim Rug** | Scout Find | Oscar Isberian rug made from antique Turkish kilims that have been cut into smaller pieces and stitched together into a contemporary rug.

**Cabinet** | Scout Find | Vintage piece with an adjustable patina, rescued from a post office in Springfield, IL.

**Insignia 55” LED TV** | Gift of: Best Buy | bestbuy.com | Best Buy’s private label brand, Insignia, offers amazing 1080p 120Hz performance and environmentally friendly production practices.

**Coffee Table** | Scout Find | Designed and crafted by Thomeworks, this table offers classical appeal with a modern twist and is tailored perfectly to the lounge space





## INNOVATIONS... THEN AND NOW

This year, the *Smart Home* showcases amazing historical discoveries and gadgets from the Museum's collection, paired with their contemporary counterparts selected by Gizmodo. Compare and contrast old vs. new and see how early inventions made way for some of today's most advanced technologies.

**THEN - Full Furniture Television Set, 1925**  
**NOW - Boxee Box by D-Link** | Gift of: Boxee, Inc. | [boxee.tv](http://boxee.tv) | Connect to your TV and watch any TV show from the internet or movies from subscription services

**THEN - "Call Me" Mantel Clock, ca. 1920**  
**NOW - Klock-01** | Gift of: Areaware | [areaware.com](http://areaware.com) | Designed by Singgih Kartono and made from sustainably harvested wood.

**THEN - Handheld Plastic A.M. Radio, ca. 1970**  
**NOW - XMp3i™ Portable Radio** | Loaned by: SiriusXM Radio | [siriusxm.com](http://siriusxm.com) | Listen at home or in your car with SiriusXM's most versatile radio.

**THEN - Sony Walkman ca. 1988**  
**NOW - MIXA - Digital Mix Tape** | Gift of: Beep Industries Ltd. | [beephq.com](http://beephq.com) | MIXA is a USB tape and can be refilled and reused over and over.

**THEN - Corona Typewriter, ca 1900**  
**NOW - Apple Wireless Keyboard** | Gift of: Best Buy | [bestbuy.com](http://bestbuy.com) | Features Bluetooth technology for wireless use up to 30 feet away from your Mac. **TiVo Slide Remote** | Gift of: TiVo Inc. | [tivo.com](http://tivo.com) | Puts the full power of TiVo in the palm of your hand.

**THEN - Polaroid Camera with Leather Case, ca. 1970**  
**NOW - Eye-Fi Mobile X2** | Gift of: Eye-Fi | [eye.fi](http://eye.fi) | Memory card wirelessly uploads media to your computer, smartphone, tablet or favorite online site.

**THEN - Brownie Camera, ca. 1920**  
**NOW - Canon Rebel T3i with 18-55mm Lens** | Gift of: Best Buy | [bestbuy.com](http://bestbuy.com) | EOS Feature Guide with enhanced Quick Settings Screen for detailed descriptions of settings to make using this camera super easy.

**THEN - Phonograph Recording in its Original Container, ca. 1895**  
**NOW - Western Digital 2TB Network Drive** | Gift of: Best Buy | [bestbuy.com](http://bestbuy.com) | Share media with everyone on a wired or wireless network with this network drive; compatible with PC and Mac for wide-ranging use.

**THEN - Atari Gaming Station, ca. 1981**  
**NOW - Nintendo 3DS** | Gift of: Best Buy | [bestbuy.com](http://bestbuy.com) | Vivid colors, brilliant action and 3D depth await you on the other side of the 3DS' top screen.

**Sofa** | Scout Find | Mid-century sofa found at a Chicago antiques store. Comfort Upholstery turned this original three-seater into a more modern two seater.

**Sofa Upholstery** | Sofa Upholstery | Caress/Noir, Brentano Green | Gift of: Brentano, Inc. | [brentanofabrics.com](http://brentanofabrics.com) | Environmentally friendly faux leather.

**Rubik's Slide™** | Gift of: Techno Source | [technosourceusa.com](http://technosourceusa.com) | Combines simplicity and fun of casual games with fast-paced, brain-busting cubing.

**Tape Lamp** | Loaned by: Transparent House in collaboration with Andrei Hakhovich | [tapelamp.com](http://tapelamp.com) | Hand-assembled from micro-cassettes.

**d°light Bubbles** | Gift of: Diana Lin Designs | [dianalindesigns.com](http://dianalindesigns.com) | Intriguing LED light you won't throw away.

## LIVING ROOM

**Knoll Chairs** | Scout Find | Vintage chairs, sourced locally. Upholstered in rubbRe™ | Gift of: Vulcana® | [vulcana.net](http://vulcana.net) | Material made in the USA from recycled car tires, available in a variety of colors.

**Shaggy Wool Rug** | Scout Find | Oscar Isberian rug made from reclaimed wool from vintage kilim rugs that have been unraveled and rewoven in the Turkish countryside.

**Walnut Console** | Scout Find | Found in an industrial firm, on the west side of Chicago, sanded down to the raw wood, and then refinished and restored by Furniture Revival.

**Ted Harris Lamps** | Scout Find | Metal globe stands repurposed into lamps.

**Sonance Invisible Series Speakers** | Gift of: Dana Innovations | [danainnovations.com](http://danainnovations.com) | Deliver on the long held desire that speakers be heard but not seen. Invisible Series products can be used in standard sheetrock as well as textured and wallpaper surfaces.

*The Smart Home showcases how to simplify the total experience of your home, by seamlessly integrating efficient and elegant lighting control systems, audio and video distribution, and energy monitoring into a single intelligent system.*

## HOME AUTOMATION

**AMX Home Automation** | Gift of: AMX | [amx.com](http://amx.com) | AMX Solutions automate technologies enabling homeowners and businesses to reduce energy consumption.

**Control Modules for AMX System** | Gift of: Module Depot, Inc. | [moduledepot.com](http://moduledepot.com) | The parts behind your home.

**GSLogic Home Automation Software for AMX Systems** | Gift of: GSLogic | [gslogic.net](http://gslogic.net) | Controls and automates the home.

**HomeWorks Lighting Control System** | Gift of: Lutron | [lutron.com](http://lutron.com) | System provides convenient control of a home's lighting and shades and can be integrated with security systems, heating and cooling systems and more.

**F2 v5 2 Zone Music Server** | Loaned by: ReQuest | [request.com](http://request.com) | Provides the ultimate audio video experience.

**Equipment Rack, Power Distribution and Accessories** | Gift of: Middle Atlantic Products | [middleatlantic.com](http://middleatlantic.com) | Provides end-to-end solutions maximize the operation and lifespan of many critical systems.

**Wire, Cables and Interconnects for Connection of System Equipment** | Gift of: Planet Waves/PWCIS | [pwcis.com](http://pwcis.com) | All connectors are reusable.

**Acer Aspire Revo** | Gift of: Best Buy | [bestbuy.com](http://bestbuy.com) | Desktop computer with built-in wireless networking lets you connect to the Internet without wires.

**Sony S580 Blu-ray Player** | Gift of: Best Buy | [bestbuy.com](http://bestbuy.com) | Enjoy your favorite movies in high-definition with this Blu-ray Disc player

*-Tom Doherty, Principal, Doherty Design Group*



# SECOND FLOOR

## HOME OFFICE

**Numbers LED Clock** | Gift of: Areaware | areaware.com | LED clock requires minimal power.

**Square Storage Unit** | Scout Find | Heavy gauge iron with gorgeous shelves. This piece nestles up against the wall, and serves as a counterpoint to the industrial work table.

**Blue Metal Bin** | Scout Find | This industrial bin has many cubbies that originally held nuts and screws.

**Industrial Work Table** | Scout Find | From the industrial corridor on the westside of Chicago, retrofitted the perfectly fit the alcove.

**EOps x Michael Young Noisezero i and ECO edition in-ear headphones with Remote and Mic for iPod, iPhone and iPad** | Gift of: EOps | eopstech.com | World's first eco-friendly comstarch bio-plastics earbuds with unique horn shaped chamber to optimize acoustics.

**Konkreet Performer** | Gift of: Konkreet Labs | konkreetlabs.com | Unique iPad user interface for professional music control in the studio and live on stage.

**Recon-Zeal Transcend** | Loaned by: Recon Instruments | reconinstruments.com | World's first GPS-enabled goggles with head-mounted display.

**Fiskars Cuts+More™ Scissors** | Gift of: Fiskars | fiskars.com | Provides the power of multiple tools in the palm of your hands.

**LED Pushpins** | Loaned by: Dynamism | dynamism.com | An update on the office supply staple with a bright and colorful feature.

**Broccoli** | Gift of: DreamsUSA Inc. | dreams6.com | Vibrant-colored sheets easily assemble into a business card holder, inspired by broccoli.

**Sharpie® Liquid Pencil** | Gift of: Sharpie® | Sharpie.com | Smooth like a pen, but erasable like a pencil.

**S3 Arctic** | Gift of: Wicked Lasers | wickedlasers.com | The first laser to have multiple operating modes and up to 1000 mW of output.

**Herman Miller Leaf Lamp** | Gift of: fuseproject | fuseproject.com | LED task light that offers the user the choice of warm mood light and cool work light.

## BATHROOM 2

**Shower and Floor Tiles** | Squak Mountain Stone countertop slab, Color: Natural | Gift of: Tiger Mountain Innovations, Inc. | tmi-online.com | Handmade from recycled glass, paper and low-carbon cement.

**Showertime** | efergy.com | Allows user to decide amount of water to be used for each shower and then alerts user once limit has been reached.

**Countertop** | Gift of: Terra Green Ceramics | terragreenceramics.com | Made with 55 percent recycled glass content and qualifies for LEED certification points.

## MASTER BATHROOM

**Cybertecture Mirror** | Loaned by: James Law Cybertecture (Mirror) Ltd. | cybertecturemirror.com | With a touch, the mirror elegantly displays and monitors the time, temperature, local traffic and news, energy consumption and health data via a wireless connection.

**Kendall Charcoal Paint** | Gift of: Benjamin Moore | benjaminmoore.com | Zero-VOC premium paint available in thousands of colors; exceeds LEED and Green Seal GS-11 standards.

**Crush Recycled Glass Tile** | Gift of: Fireclay Tile | fireclaytile.com | Local Vendor: The Fine Line | finelinetile.com | Recycled glass tile, fully created from pre-consumer waste glass, handmade in California.

**Brick Flooring** | Gift of: Eccologie | eccologie.com | Local Vendor: The Fine Line | finelinetile.com | Tiles reclaimed from old factory demolitions. Characteristic colors of the Chicago region clay provide a rich pink-orange patina.

**Shower Head** | Purist Ecoefficient showerhead | Gift of: Kohler | us.kohler.com | 30 percent reduction in water consumption without sacrificing performance.

**Cabinets** | Scout Find | These two vanities were originally part of one console, similar to the one seen in the living room. Furniture Revival repurposed the original piece to create two individual vanities, complete with an ebonized black lacquer finish.

**Toilet** | Persuade | Gift of: Kohler | us.kohler.com | A two-button actuator offers .8- or 1.6- gallon flush options for light or bulk waste, saving as much as 6,000 - 25,000 gallons of water over traditional 1.6- or 3.5- gallon toilets.

**Glass2 (Harmony) Countertops** | Gift of: American Granite | glass2.com | Local Vendor: The Fine Line | finelinetile.com | Fabrication and Installation: TTS Granite Inc. | ttsgranite.com | 99 percent recycled glass, and contains no resin, glue or chemicals. Scratch and stain-resistant, bacteria-free, and tolerant of both cold and hot temperatures.

**Soladey J3X Ionic and Anti-Bacterial Toothbrush** | Gift of: Euroviva Health Ltd. | soladey.com | Saves water and toothpaste and runs on free solar energy!

## MASTER BEDROOM

**Slate Headboard** | Scout Find | Chalkboard found in an elementary school on the Southside of Chicago.

**Night Stands** | Scout Find | These night stands came from an Art Deco antiques dealership in central Ohio 20 years ago. They have been in a private residence, waiting and ready to start their third life.

**Steel Dresser** | Scout Find | This steel dresser was originally used in the 1950s, designed and manufactured by Simmons. Furniture Revival stripped away the years and old paint to reveal a very contemporary, sleek yet subtle, metal finish.

**Wolf Gray Paint** | Gift of: Benjamin Moore | benjaminmoore.com | Zero-VOC premium paint available in thousands of colors and exceeds LEED and Green Seal GS-11 standards.



**LightSleeper** | Gift of: Quincom Limited | [lightsleeper.co.uk](http://lightsleeper.co.uk) | Drug-free, non-invasive sleeping aid that project a controlled light on the ceiling above your bed.

**Lamps** | Scout Find | Time-worn globes cut along the hemispheres with lights added at the equator.

**Wallpaper** | Gift of: Seabrook | [seabrookwallpaper.com](http://seabrookwallpaper.com) | Made from natural paper and grasses.

**Ping Lamp** | Loaned by: Studio Sophisti | [studiosophisti.nl](http://studiosophisti.nl) | Two lamps are connected with each other via the internet. One user will see his/her lamp glow when the other switches theirs on and vice versa.



**Mattress and Cover** | Size: Full | Gift of: Bower Natural Bedding | [bownaturalbedding.net](http://bownaturalbedding.net) | Natural rubber latex and organic cover.

**Insignia 46" LED TV** | Gift of: Best Buy | [bestbuy.com](http://bestbuy.com) | Best Buy's private label brand, Insignia, offers amazing 1080p 120Hz performance and environmentally friendly production practices.

**Goggle Umbrella** | Gift of: 25TOGO DESIGN | [25togo.com](http://25togo.com) | Incorporates a viewing panel so you can stay dry and still see.

**STARLITE** | Gift of: Area Plus Ltd. | [areaplus.com.hk](http://areaplus.com.hk) | USB rechargeable mobile LED light.

**Artwork** | Scout Find | Designed by Michelle Peterson-Albandoz and constructed from recycled wood panels.

## FAMILY LAB

**Lab Table** | Scout Find | A traditional lab table made to work in the home; steel base complimented with a refinished wood top from Furniture Revival.

**Messenger Bag** | Scout Find | Loaned By: Defy Bags | [defybags.com](http://defybags.com)

**Vintage Steelcase Storage Cabinet** | Scout Find | The centerpiece of the family science lab — formerly at the University of Chicago.

**Wolf Gray Paint** | Gift of: Benjamin Moore | [benjaminmoore.com](http://benjaminmoore.com) | Zero-VOC premium paint available in thousands of colors and exceeds LEED and Green Seal GS-11 standards.

**Terrarium and Tools** | Loaned by: Sprout Home | [sprouthome.com](http://sprouthome.com) | A low-light appropriate arrangement of plants and dried natural materials. Little shovels and rakes assist with building and upkeep of the terrarium.

**Kiwi Watering Can** | Gift of: Alessi | [alessi.com](http://alessi.com) | Designed by Paoto Lomazzi and Donato D'Urbino.

**Voltaic 15 watt, 20 Volt Solar Panel** | Loaned by: Voltaic Systems | [voltaicsystems.com](http://voltaicsystems.com) | Power laptops and other electronics from the sun.

**Soil Lamp** | Loaned by: Marieke Staps | [mariekestaps.nl](http://mariekestaps.nl) | Lamp runs on mud and provides free and environmentally friendly energy forever.

**LabBox Grower and LabBox Grower Pro-Series** | Gift of: PocketGrow-Toadlab, LLC | [PocketGrow.com](http://PocketGrow.com) | Educating and promoting environmentally sound urban gardening through economically sustainable agricultural systems.

**OAT Red White/Beige Sneakers** | Gift of: OAT Shoes | [oatshoes.com](http://oatshoes.com) | Constructed from hemp canvas and bioplastic.

**Extech ExStik® pH/Conductivity Meter** | Gift of: Extech Instruments | [extech.com](http://extech.com) | pH meters help home gardeners grow greener, healthier gardens.



**The Original by Bamboo Bottle Company** | Loaned by: Bamboo Bottle Company | [bamboobottleco.com](http://bamboobottleco.com) | Clean, safe and stylish bottle constructed from bamboo and glass.

**Eva Solo Self-Watering Pot** | Gift of: Eva Solo | [EvaSolo.com](http://EvaSolo.com) | Nylon wick keeps plants moist, plants are healthy and never over- or under -watered.

**Egging** | Gift of: Noted | [notedco.com](http://notedco.com) | Crack its top and discover a garden ready for sowing!

## BOY'S ROOM

**PoppiBoard Bed** | Gift of: Resource Furniture | [resourcefurniture.com](http://resourcefurniture.com) | Sustainable living by efficiently using space; desk on the front remains parallel to floor even when the bed is opened.

**Hot Wheels Video Racer Vehicle** | Loaned by: Mattel | [mattel.com](http://mattel.com) | Action video camera inside a die-cast vehicle that puts you in the driver's seat of your own Hot Wheels® vehicle.

**Sphero** | Loaned by: Sphero | [gosphero.com](http://gosphero.com) | First robotic ball controlled by a smartphone using Bluetooth technology.

**Celestron SkyProdigy 130** | Loaned by: Celestron | [celestron.com](http://celestron.com) | Automatic alignment smart telescope provides a read out giving quick facts about the objects you are looking at in the sky.

**Huey the Color Copying Chameleon Lamp** | Gift of: ThinkGeek | [thinkgeek.com](http://thinkgeek.com) | Matches the color of the surface he sits on using two LEDs and a sophisticated optical sensor to determine color.

**Getting Started with Arduino** | Gift of: Make Magazine/Maker Shed | [MakerShed.com](http://MakerShed.com) | Inspires, informs and enables makers and artists interested in physical computing.

**Starship Earth II** | Gift of: Spherical Concepts | [sphericalconcepts.com](http://sphericalconcepts.com) | 3-D star atlas helps you locate and identify celestial objects from anywhere on Earth, at any hour, any day.

**Bandai X Flyer** | Loaned by: Dynamism | [dynamism.com](http://dynamism.com) | Fusion of two classic toys, the hacky-sack and frisbee, brought to the modern age. Floats and sinks in the air, responding to body movement.

**Sega Toys Homestar Home Planetarium** | Loaned by: Dynamism | [dynamism.com](http://dynamism.com) | Create a beautiful star-lit night sky in the comfort of your own home.

**TRON: Legacy Zero Gravity Light Cycle** | Gift of: Disney Consumer Products | [disney.go.com/tron](http://disney.go.com/tron) | Can be driven on walls or ceilings as fans act out their favorite movie moments from *TRON: Legacy*.

**Parrot AR. Drone** | Loaned by: Parrot | [parrot.com](http://parrot.com) | First quadricopter controlled by an iPod touch®, iPhone®, or iPad™ combines real and virtual worlds to offer an unparalleled flight experience.

**Casio Green Slim XGA Projector** | Gift of: Best Buy | [bestbuy.com](http://bestbuy.com) | Features a Hybrid Light Source that combines laser and LED technology for brightness that can last up to 20,000 hours.

**Energizer®Energi To Go® SP1001 Portable Solar Charger** | Gift of: XPAL Power | [energizerpowerpacks.com](http://energizerpowerpacks.com) | Rechargeable, solar-powered portable charger keeps your devices working.

**Robotic Chick** | Loaned by: Dynamism | [dynamism.com](http://dynamism.com) | Animatronic baby chick with realistic chirping and flapping wings.

## GARAGE

**Solar Hybrid Automower** | Gift of: Automower | [automower.com](http://automower.com) | Automatic lawn maintenance powered by sunlight.

**Torch** | Gift of: Wicked Lasers | [wickedlasers.com](http://wickedlasers.com) | The worlds most powerful flashlight, with 4100 lumens of raw power.

**Bakfiets Cargobike** | Loaned by: Dutch Bike Co. Chicago | [dutchbikeco.com](http://dutchbikeco.com) | Marine plywood cargo box on this bike means you don't need a car.

**Folbot Citibot Kayak** | Gift of: Citibot | [folbot.com](http://folbot.com) | 10-foot kayak that folds into a backpack and weighs only 24lbs. Provides an easy way to enjoy eco-friendly recreation.

**Garage Doors** | Gift of: Clopay Building Products | [clopay.com](http://clopay.com) | Durable rust-proof aluminum frame with insulated tempered glass allowing natural light to filter through while maintaining relative privacy.

**Garage Door Openers** | Gift of: Chamberlain | [liftmaster.com](http://liftmaster.com) | Mounts easily on the wall, freeing up ceiling space and operates even when the power goes out. Identified for LEED by the U.S. Green Building Council.

**Diogen™ Bulb** | Gift of: Diogen Lighting | [diogenlighting.com](http://diogenlighting.com) | The unique retrofit design of the Diogen Bulb universally replaces standard incandescent and compact fluorescent CFLs.

**ULTRAponics GroTube** | Gift of: Ultraponics | [ultraponics.net](http://ultraponics.net) | Hydroponics allow for fast growth in small spaces with minimal water, allowing for gardeners to start seedlings indoors during cool weather.

**IF Mode Folding Bicycle** | Loaned by: Pacific Cycles | [pacific-cycles.com](http://pacific-cycles.com) | One less car when function meets style.

**Gardening Tools and Products** | Gift of: Fiskars | [fiskars.com](http://fiskars.com) | These tools are created for maximum efficiency and ease of use.

**Q Drum** | Gift of: Q Drum | [qdrum.co.za](http://qdrum.co.za) | Designed to roll 50 liters of water across all terrain types when a water source is not near.





# LANDSCAPING AND VEGETABLE GARDEN

From the ground up to the roof, *Smart Home's* landscape design demonstrates an eco-friendly aesthetic with systems that sustain and replenish the environment: green roofs, Ipê decking, rain barrels, bioswales, porous paving and rain gardens. Prairie, dune and oak savannah plantings recall our region's past and working gardens present food production. The landscape is carefully designed and managed to conserve and protect natural resources.

- Native plants have extensive root systems, are well-adapted to our climate, and attract beneficial insects.
- Green roofs reduce energy costs, decrease the urban heat island effect by cooling air temperature and slow stormwater run-off.
- Permeable pavements, rain gardens and bioswales ease water run-off into surrounding streams and lakes and enable slow, healthy seepage into the soil.
- Rain barrels harvest rainwater to irrigate plants, so we use less drinking-quality water.

- Fresh vegetables and herbs are available during three seasons.
- Organic mulch minimizes weed invasion, converts moisture, reduces soil temperature fluctuations, protects root systems and keeps vegetables clean.
- Yard and garden waste is composted and added to the garden as a rich soil conditioner.
- Space is maximized via trellises, staking tomatoes, container gardening, and mixing fast-maturing crops with slower growers.
- Raised beds demonstrate options for bringing in healthy soil when urban land is contaminated. They also improve drainage, maximize space by eliminating walkways between rows, avoid compaction and aid gardeners with physical disabilities.
- Two hives house more than 60,000 bees at the height of the summer. Bees help pollinate the plants and provide honey, a natural sweetener.

## University of Illinois

University of Illinois Extension educators train volunteer Master Gardeners to provide gardening programs and horticultural activities to educate the public. U of I Extension Master Gardeners plant and maintain these gardens and will be available to answer your gardening questions on select Tuesdays, Thursdays and Saturdays. For more information visit us on the web at [web.extension.uiuc.edu/cook/urbanhort.html](http://web.extension.uiuc.edu/cook/urbanhort.html).

## Jacobs/Ryan Associates

Overall Landscape Design | [jacobsryan.com](http://jacobsryan.com) | With strong midwestern sensibilities, Jacobs/Ryan has provided thoughtful landscape architectural consulting services for more than three decades.

## BIOTILE® Vertical Garden System

| Gift of: Sage Botanic Media/Biotile | [sagebotanicmedia.com](http://sagebotanicmedia.com) | 100 percent recyclable, water-efficient, energy-saving, habitat-providing, carbon-absorbing vertical garden system that can be used indoors or outdoors in warm and cold climates.

## Openlands Native Habitats

Program | [openlands.org](http://openlands.org) | A Clean Air Counts partner. Bioswale and Rain Garden Openlands is dedicated to preserving and enhancing public open space in northeastern Illinois. The organization's Community Greening program supports community and school-based greening within Chicago.

## Green Grid | Gift of: Weston Solutions, Inc.

| [greengridroofs.com](http://greengridroofs.com) | Modular green roof system preplanted in 100 percent recycled modules. Saves energy and reduces air and water pollution.

## Porous Paver System | Gift of:

Unilock | [unilock.com](http://unilock.com) | Installation Gift of: Clauss Brothers, Inc. | Prevents rain water run-off by allowing water to permeate between the pavers.

**Living Wall** | Gift of: ELT Easy Green, Inc. | [elteasygreen.com](http://elteasygreen.com) | Unique modular design allows efficient water management and diverse planting options. Growing vertically helps maximize green space in urban areas. | Plants gift of: JFNNew | [jfnnew.com](http://jfnnew.com)

## Vegetables, Herbs and Bedding Plants | Gift of: Burpee Home Gardens

| [burpeehomegardens.com](http://burpeehomegardens.com) | Growing your own produce reduces your carbon footprint!

## AsphaltEdge | Gift of: Permaloc Corporation

| [permaloc.com](http://permaloc.com) | Permanent, sustainable aluminum edgings made from recyclable aluminum.

## Earthboxes | Gift of: The Growing Connection and Earthbox

| [thegrowingconnection.org](http://thegrowingconnection.org) | Maximizes space and uses 60 percent less water. Program links participants together via their website.

## Cistern | Gift of: RainHarvest Systems and Rotonics-Colorado

| [RainHarvest.com](http://RainHarvest.com) | [rotonics.com](http://rotonics.com) | Rainwater collection systems conserve water and reduce storm water erosion.

## Creative Container Garden Design Services, Seasonal Features | Gift of: Tu Bloom Designs®

| [TuBloom.com](http://TuBloom.com) | Cultivating dynamic landscape beautification from a globally sensitive garden approach.

## Landscape Trough Table | Gift of:

Cole & Sons | Designed by Greg Pierceall and made of concrete and repurposed timbers and recycled metal.

## Fiskars Tuscany Rain Barrel and DiverterPro™ | Gift of: Fiskars

| [fiskars.com](http://fiskars.com) | Designed to easily intergrate into the home's downspouts and collect water for landscaping.



# OUTDOOR LIVING

The *Smart Home's* outdoor living spaces are an important element in the home's overall sustainable design. One of the keys to sustainable design is designing to use less—less space, less energy, fewer materials—and blurring the line between the indoors and outdoors helps do just that. Indoor and outdoor rooms open into each other to create one big, connected living space. The roof decks maximize all of the outdoor space the home has to offer. Sustainable design isn't just about minimizing our impact on the environment, it's also about enjoying it.

**Alfresco Grey Rectangular Table and Dining Chairs with Graphite Sunbrella® Cushions** | Gift of: Crate and Barrel | [crateandbarrel.com](http://crateandbarrel.com) | Looks like real wood; waterproof and UV fade and mildew resistant to ensure a long lifespan.

**Decking** | Gift of: Trex | [trex.com](http://trex.com) | Made of reclaimed plastic and scrap wood, which would otherwise be in a landfill. Maximizes outdoor spaces.

**Roof Deck Supports and Ipê Wood Tiles** | Gift of: Bison Deck Supports | [BisonDeckSupports.com](http://BisonDeckSupports.com) | Constructed from select-cut Brazilian Ipê, which has been harvested in an environmentally responsible method designed to preserve the economic viability of rain forest hardwoods.

**Cyl Outdoor Fireplace** | Gift of: The Tile Gallery | [tilegallerychicago.com](http://tilegallerychicago.com) | Runs on environmentally friendly denatured alcohol and is fully portable.

**Wooden Planters** | Scout Find | Rustic white-washed planters rescued from a farm in Northern Indiana.

**1930's Russell Woodard White Sculptura Chairs** | Scout Find | Found at an Edgewater antique mall.

photo: courtesy of Crate and Barrel

## ECO-TIPS

Learn ways to leave a smaller eco-footprint inside and outside your home. Visit [msichicago.org/smarthome](http://msichicago.org/smarthome) for more!



### SMART DESIGN

Place furniture near natural light sources—working near the window means less need for electric lights.

In the summer, open windows for cross breezes, and install window and ceiling fans instead of cranking on the AC. In the winter, change the direction of the ceiling fans to bring the warm air down.

Run-off can carry toxic chemicals into nearby lakes, river, and streams. Encourage rain and snow water to seep into the ground rather than wash away. Use permeable materials like gravel and woodchips for walkways and borders.



### MATERIAL EFFICIENCY

Recycle! It's really easy and makes a huge difference. Visit [illinoisrecycles.org](http://illinoisrecycles.org) to find more recycling information.

If you are planning to purchase new materials for your home, consider bamboo, cork or natural linoleum flooring; FSC-certified wood cabinets; and recycled glass tiles; recycled paper countertops.

Bring your own cup to your favorite coffee shop, or if you are eating in, ask for a "for-here" mug.

Compost fruit and veggie scraps, paper scraps, coffee and tea grounds, eggshells and more. It's easy, saves garbage from the landfill and helps your garden grow!

Buy vintage/recycled clothing. Many designers are creating hot new fashions with re-used and recycled materials. Donate your gently used items.

Use your library card. Imagine all the books you can read for FREE! Save money and paper.



### ENERGY EFFICIENCY

Unplug! Just keeping your cellphone, TV, and DVD players plugged in wastes five percent of all the energy Americans use each year.

For each degree you turn down your thermostat in the winter, you save about one percent on what it costs to heat your home and you trim your carbon emissions.



### WATER EFFICIENCY

Turn off the water when you brush your teeth to save around four gallons each person, each time.

Fix that leaky toilet or sink. You may be losing as much as 200 gallons a day.

Use the dishwasher (8.7 gallons per load) instead of hand-washing (as much as 20 gallons). Be sure to use a full load and scrape instead of rinsing.

If you must water the lawn, wait until night or early morning so it won't evaporate during the heat of the day. Use soaker hoses instead of traditional sprinklers for deeper saturation. Give gardens and lawns a longer deeper drink, less often.



### HEALTHY ENVIRONMENT

Switch to natural cleaners that you can make yourself. They are less expensive than store-bought, clean just as well and are safer for your family and pets. All you need is white vinegar, lemon juice, baking soda, borax and essential oils for fragrance.

For the next paint job or home project, look for low- or no- VOC paints, thinners, carpet adhesives, etc.

Recycle hazardous waste and electronics appropriately. Check [illinoisrecycles.org](http://illinoisrecycles.org) for more information.

Plant a tree. One mature tree cleans up after 13 cars!

Take public transportation!

# GLOSSARY

**Biodegradable** A product or material made from plant or animal material that, after usage, is broken down quickly by other living organisms.

**Bioswale** A pocket or indentation in the ground used to collect water that would otherwise run off into nearby streams, rivers and lakes.

**Carbon Footprint** The environmental impact we have depending on the choices we make such as raw-material selection, energy selection, transportation, etc.

**CFL** Compact fluorescent light bulb. Eco-tip: In CFL bulbs, gas inside the bulb emits light when a chemical reaction takes place. CFLs use 75 percent less energy than traditional (incandescent) bulbs and CFLs last up to 10 times longer.

**Compost** The act of recycling organic materials for fertilizer.

**Cradle-to-Cradle** A term used to describe a material or product that is recycled into a new or similar product at the end of its intended life.

**Cradle-to-Grave** A term used to describe a material or product that is dumped in a landfill or burned at the end of its intended life.

**Emission** The release of any gas, particle or vapor into the environment.

**ENERGY STAR** A U.S. government sponsored program designed to help consumers save money and energy.

**Environmentally Friendly** A term often used to designate a product or process that has a reduced carbon footprint when compared to other products or processes.

**Fly Ash** The leftover particles resulting from burning coal; often used as a filler material in concrete to cut down on raw material usage.

**FSC** Forest Stewardship Council is an international not-for-profit organization that seeks to find solutions to problems created by irresponsible forestry practices and to reward responsible forest management.

**Greenhouse Effect** Rise in temperature that the Earth experiences because certain gases in the atmosphere trap energy from the sun.

**Greenhouse Gases (GHG)** Gases that trap heat in the atmosphere such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O).

**Grey Water** Post-bath or sink water used to flush toilets and for landscape watering.

**LED** Light emitting diode. Eco-tip: Compared to traditional incandescent bulbs, LEDs are incredibly energy efficient and can last up to a million hours.

**Modular** An architectural system in which separate components (like rooms) can be easily added or removed from the overall structure.

**Net Metering** Programs that provide an incentive for customers to invest in renewable energy. Customers can generate their own energy to offset consumption; meters turn backwards

when energy generated exceeds electricity used. Visit [eere.energy.gov](http://eere.energy.gov) for more information and availability.

**Off-gassing** The evaporation and release of chemicals from materials (often building and home furnishing materials) that lead to unhealthy indoor living environments. For example, traditional paints, stains, and flooring release toxic chemicals long after they are installed.

**Organic** Products that are commonly produced without the use of pesticides, herbicides and other harmful chemicals.

**Photovoltaic (PV)** Cell or devices that directly convert sunlight into electricity.

**Real-time Pricing** A utility monitoring and billing structure whereby consumers are billed for the power they use on hourly market prices. This structure enables consumers to use power during non-peak times to save money. ComEd currently offers this program to consumers.

**Renewable Energy** Energy from sources that regenerate or re-occur such as wind or sunlight.

**Sustainability** Practice of making products or materials using resources that can be quickly replaced or replenished.

**VOCs** Volatile organic compounds found in paints and carpet glue, are the leading cause of indoor air pollution.

## ECO-RESOURCES

### ALTERNATIVE ENERGY RESOURCES

Illinois Clean Energy Community Foundation | [illinoiscleanenergy.org](http://illinoiscleanenergy.org)

American Solar Energy Society (ASES) | [ases.org](http://ases.org)

American Wind Energy (AWEA) | [awea.org](http://awea.org)

The Green Power Network | [Eere.energy.gov/greenpower](http://Eere.energy.gov/greenpower)

Renewable Energy | [AccessRenewableenergyaccess.com](http://AccessRenewableenergyaccess.com)

Chicago Department of the Environment | [cityofchicago.org/environment](http://cityofchicago.org/environment)

Chicago Center for Green Technology | [cityofchicago.org/environment](http://cityofchicago.org/environment)

### ECO-FRIENDLY HOME RESOURCES

American Lung Association, Health House | [healthhouse.org](http://healthhouse.org)

ENERGY STAR's Home Energy Saver | Find out how you can reduce your own energy bill by typing in your zipcode at [hes.lbl.gov/hes](http://hes.lbl.gov/hes)

National Geographic's Green Guide | [thegreenguide.com](http://thegreenguide.com)

Leadership in Energy and Environmental Design (LEED) | [usgbc.org/LEED](http://usgbc.org/LEED)

Cedia | [cedia.net](http://cedia.net)

Healthy House Institute | [hhinst.com](http://hhinst.com)

ComEd | [comed.com](http://comed.com)

ENERGY STAR® | [energystar.gov](http://energystar.gov)

## GARDENING

A Taste of Gardening | [urbanext.uiuc.edu/tog](http://urbanext.uiuc.edu/tog)

My First Garden | [urbanext.illinois.edu/firstgarden](http://urbanext.illinois.edu/firstgarden)

Smart Home Garden Blog | Follow the development of the vegetable garden throughout the growing season | [web.extension.uiuc.edu/cook](http://web.extension.uiuc.edu/cook)

Container Gardening | [urbanext.uiuc.edu/container](http://urbanext.uiuc.edu/container)

Chicago Home Composting | [urbanext.uiuc.edu/homecomposting](http://urbanext.uiuc.edu/homecomposting)

The Green Gardener's Guide by Joe Lamp'1

## PUBLIC TRANSPORTATION

Chicago Transit Authority (CTA) Trip Planner | [transitchicago.com](http://transitchicago.com)

Metra | [metrarail.com](http://metrarail.com)

## READING GREEN

Chicago Public Library | [chipublib.org](http://chipublib.org)

## SHOPPING GREEN

Watch your eco-footprint shrink at the *Smart Home's* Shop Earth (located in the Henry Crown Space Center).

Resale and Outlet Guide | [abstractpublishing.com/resale/northsuburbs.html](http://abstractpublishing.com/resale/northsuburbs.html)

Scout | [Scoutchicago.com](http://Scoutchicago.com)

Green Depot | A local one-stop shop for energy intelligent, environmentally sensitive and healthy building materials serving homeowners and the building and design community. | [greendepot.com](http://greendepot.com)

Chicago's Downtown Farmstand | 66 E. Randolph Street, Chicago, IL | [chicagofarmstand.com](http://chicagofarmstand.com)

## RECYCLING

[illinoisrecycles.org](http://illinoisrecycles.org) and click on "E-cycling" for a list of collection sites

[earth911.org](http://earth911.org)

[Chicagorecycling.org](http://Chicagorecycling.org)

## WATER

American Water Works Association (AWWA) | [awwa.org](http://awwa.org)

Environmental Protection Agency Office of Water | [epa.gov/water](http://epa.gov/water)

# SPECIAL THANKS TO SMART HOME SPONSORS AND PARTNERS

## SPONSORS

### ComEd

ComEd is uniquely positioned to bring value to its customers and the communities it serves, particularly when it comes to saving energy and helping the environment. ComEd has been committed to environmental stewardship, being a valuable energy information provider.

The utility's energy efficiency and education programs are part of Exelon 2020, the comprehensive corporate strategy of ComEd's parent company, Exelon, to reduce, offset or displace more than 15 million metric tons of greenhouse gas emissions per year by 2020. In June 2008, ComEd launched its Smart Ideas portfolio of energy efficiency offerings, expected to save ComEd customers more than \$155 million throughout the duration of the programs. Smart Ideas includes discounted CFL bulbs, weatherization initiatives, energy efficiency curriculum for teachers, environmentally responsible appliance recycling, and many more ways to help our customers reduce costs, save energy and help the environment.

ComEd also continues to take steps to reduce its own carbon footprint, whether by operating the seventh largest fleet of green vehicles in the nation, restoring Illinois' prairies, or reducing the environmental impact of ComEd facilities.

Sponsored by:

**ComEd**

Partnered with:



GIZMODO

michelle kaufmann studio



## PARTNERS

### Michelle Kaufmann

Michelle Kaufmann is a nationally recognized leading architect specializing in sustainable, innovative, and smart buildings. Working under the belief that thoughtful, sustainable homes should be accessible to more people, Kaufmann works with off-site construction technology and creative design processes. The goal in all of her work is to make it easier for people to build beautifully green and live a more sustainable lifestyle. [michellekaufmann.com](http://michellekaufmann.com)

### Gizmodo

Gizmodo.com is the authority on the technologies that change the way we live, work, love, play, think and feel. From the humble tools in a mechanic's belt, to the cellphones that we check Facebook on, to the space shuttles and submarines we use to explore the unknown, Gizmodo's core belief is that the mastery of technology is at the core of the humankind's evolution—for better or worse. Since its launch in 2002 the site has amassed over 6 million readers through its combination of reporting, opinion and explanations of how tech changes everything around us.

### University of Illinois Extension

The University of Illinois Extension Horticulture, Environmental and Green Educator assisted the Museum in transforming the *Smart Home: Green + Wired* into an eco-friendly oasis. With the help of its Master Gardeners, University of Illinois Extension help guests create green spaces in their own lives. As the flagship outreach of University of Illinois at Urbana-Champaign, U of I Extension offers educational programs to residents of all of Illinois' 102 counties—and far beyond via its award-winning Web site. Through learning partnerships like this, University of Illinois Extension helps people put knowledge to work. Its educational programs aim to make life better, healthier, safer and more profitable for individuals and communities.