

first **KC** **suburbs**
Conserving the Past . . . Creating the Future



green
2008 **REMODELING**
IDEA BOOK



Conserving the Past . . . Creating the Future

Fairway, Kansas
Gladstone, Missouri
Grandview, Missouri
Independence, Missouri
Kansas City, Kansas
Kansas City, Missouri
Merriam, Kansas
Mission, Kansas
Mission Hills, Kansas
Mission Woods, Kansas
North Kansas City, Missouri
Overland Park, Kansas
Prairie Village, Kansas
Raytown, Missouri
Riverside, Missouri
Roeland Park, Kansas
Sugar Creek, Missouri
Westwood, Kansas
Westwood Hills, Kansas

The First Suburbs Coalition is made up of the cities that were first to grow around the core of Kansas City. Leaders from these communities work together on common issues, including modernizing housing stock, maintaining public infrastructure, and attracting and retaining businesses.

ACKNOWLEDGEMENTS

The First Suburbs Coalition would like to thank the following individuals and organizations for their contributions to this book:

City of Independence

Mary M. Hunt, Senior Planner

City of Kansas City, Mo.

Carol Adams, Environmental Management Commission

City of Raytown

John Benson, Senior Planner

City of Prairie Village

Dennis Enslinger, Assistant City Administrator

Greater Kansas City Home Builders Association

Stan Parsons, Special Projects Coordinator

Kansas City Power & Light

Mike Schifman, Product Manager, Mass Markets/Energy Solutions

Metropolitan Energy Center

Robert Housh, Executive Director

Dustin Grey Jensen, Operations and Special Projects

Mid-America Regional Council

Dean Katerndahl, Government Innovations Forum Director

Tom Jacobs, Environmental Programs Director

James Joerke, Air Quality Program Manager

Jody Ladd Craig, Public Affairs Director

Barbara Hensley, Public Affairs Coordinator

Piper-Wind Architects, Inc.

Eric Piper, AIA, Principal

Gretchen Johnson, Assoc. AIA, LEED^{AP}

Lindsay Tatro, Assoc. AIA, LEED^{AP}

what is **green** remodeling?

Green remodeling is an environmentally responsible approach to design, maintenance and renovation that provides for a healthy, comfortable, durable and energy-efficient home.

It's a new way of thinking about the products and processes involved in home remodeling. And it's a personal choice — a way you can make a difference.

Many of the older neighborhoods in Kansas City's First Suburbs are characterized by tree-lined streets and charming neighborhoods, but they also have many post-World War II homes that need to be updated to today's standards.

Remodeling is often an attractive solution for homeowners who want to stay in the neighborhoods they love, but also want modern conveniences in their homes.

The First Suburbs Coalition offered homeowners a wealth of remodeling ideas in its first *Idea Book*, published in 2005.

Now the coalition is combining its support for remodeling with its strong commitment to environmental responsibility by offering this supplemental *Green Remodeling Idea Book*, which provides practical ideas to make any remodeling project a green project — from a fresh coat of paint to a complex room addition.

Green remodeling is better for you, your family, your community and the planet — and you may be surprised to find that it can save money, too.

CONTENTS

2 Why Green Remodeling?

3 Principles of Sustainable Design

5 Three Stages of Green

6 Green Basics

10 Green Elements

14 Green Systems

18 Finding a Green Remodeling Contractor

19 Homeowner Checklist

20 Shopping Sustainably

21 Resources

why green remodeling?

it's better for you and your family

Going green is good for your health — both physical and emotional. Natural materials and natural light help create attractive rooms that make your home more comfortable.



Green designs also make your home healthier by maximizing fresh air. And using low- or non-toxic materials can decrease allergies and prevent some health problems.

Good design choices will make your home a more pleasing space, and contribute to your overall quality of life.

it's better for your pocketbook

Energy-efficient designs can have an immediate impact on your monthly utility bills. The most efficient new appliances typically use up to 50 percent less energy than older, more wasteful models.

Efficient and durable materials and features in your home not only last longer, but may also cost less to maintain in the long run.

Green remodeling can also increase the resale value of your home. More than 90 percent of homebuyers say they are willing to pay more for a home with green features.



- 1 cost savings
- 2 environmental benefits
- 3 health benefits
- 4 potential higher resale value

it's better for your community

Green homes can minimize the strain on landfills, water treatment plants, power plants and other local government infrastructure.

Buying green products locally not only supports your local economy, but also reduces the amount of energy needed to transport out-of-town goods into the area.

it's better for the planet

With green remodeling, you can enhance our environment rather than depleting it. By choosing environmentally responsible products you help protect our air, water, plants and wildlife.

As you plan your remodeling project, look for ways to minimize construction waste and recycle leftover materials. Even small steps can make a big difference.

sustainability

It's a buzzword we hear a lot when people talk about "green" principles and practices, but what does sustainability really mean?



Sustainability is the ability to meet our needs today without compromising the ability of future generations to meet theirs.

Living sustainably doesn't have to mean doing without. You want your home to be livable, comfortable and safe. Just think about the choices you make — as you begin your remodeling project, and as you go about your daily routines.

Take a look around your home. Think about the resources involved in creating the things you see around you — not just the furnishings, but also the structure itself. Everything you see required energy and raw materials to manufacture and transport.

When you choose products that require less energy to produce and maintain, or products that are made from renewable resources, you're practicing sustainability.

The small steps you take today can make a big difference tomorrow.

principles of sustainable design

● Use low-impact materials

Select materials that are non-toxic, renewable, made with recycled content and durable.

● Be energy efficient

Select products that use less energy and make use of natural energy sources.

● Choose quality and durability

Select products and building techniques that will last longer and function better, needing less frequent replacement and fewer repairs.

● Reduce, reuse, recycle

Reduce usage and consumption. Reuse or donate products whenever possible, and recycle things that have outlived their usefulness.

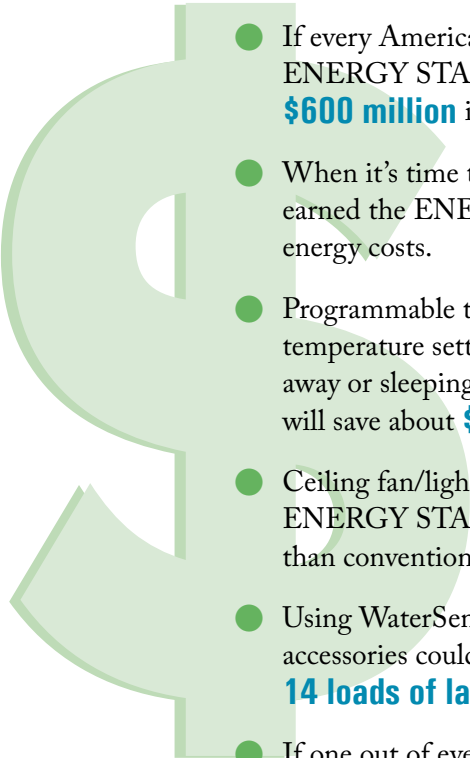
● Buy locally

Purchase products and materials that are produced or harvested locally to reduce the energy used for transport.

● Protect your health

Reduce pollutants and toxins inside your home.

Americans spent an estimated \$204 billion on home repair and remodeling in 2007. What kind of impact could green remodeling practices have?

- 
- If every American homeowner replaced just one light bulb with an ENERGY STAR qualified bulb, we would save enough more than **\$600 million** in annual energy costs.
 - When it's time to buy new appliances, choose those that have earned the ENERGY STAR label — you can save **\$80 a year** in energy costs.
 - Programmable thermostats automatically adjust your home's temperature settings, allowing you to save energy while you're away or sleeping. When used properly, a programmable thermostat will save about **\$150 per year** on your utility bills.
 - Ceiling fan/light combination units that have earned the ENERGY STAR label are about **50 percent more efficient** than conventional fan/light units.
 - Using WaterSense labeled bathroom sink faucets or faucet accessories could save your family enough water each year to do **14 loads of laundry**.
 - If one out of every 100 American homes was retrofitted with water-efficient fixtures, we could save about **100 million kilowatt hours** of electricity per year — avoiding 80,000 tons of greenhouse gas emissions.
 - If 1 percent of American homes replaced an older toilet with a high-efficiency toilet, we would save more than **38 million kilowatt hours** of electricity — enough to supply more than 43,000 households with electricity for one month.



ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy designed to save money and protect the environment through energy-efficient products and practices. It is a voluntary labeling program that identifies energy-efficient products.



WaterSense, a partnership program sponsored by the U.S. Environmental Protection Agency, helps make it easy for you to save water and protect the environment. Look for the WaterSense label to choose quality, water-efficient products.

three stages of **green**

green basics

The first stage of green remodeling includes simple, inexpensive things you can easily do today to improve your home's efficiency.

Many of these ideas focus on things you routinely do anyway — such as replacing burned-out light bulbs — but with a green twist.



green elements

The second stage suggests green ways to replace larger elements in your home, such as appliances and windows, once they have reached the end of their useful life.

If you're planning a simple remodel, this section has some good ideas for ways to incorporate green elements into your plans.



green systems

The third stage of green remodeling describes how to incorporate large-scale, sustainable systems into your home when you undertake a major remodeling project.

This section also include strategies for home additions. By considering the surrounding environment, you can put nature to work for you as you plan your green addition.

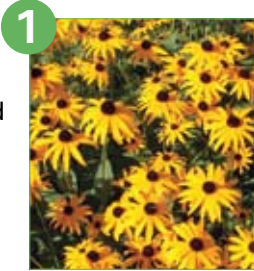


for your **home and yard**

green basics

LANDSCAPE WITH NATIVE PLANTS

Landscape with flowers, shrubs, trees and grasses that are native to our area. Native plants need less water and fertilizer, and are easier to maintain. Find a list of native plants at www.marc.org/Environment/Water/native_plants_list.htm.



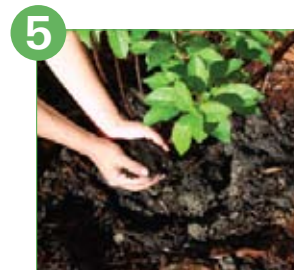
LIGHT THE WAY WITH SOLAR POWER

Light walkways, patios and other outdoor spaces with photocell lights that rely on solar power.



TUNE UP LAWN AND GARDEN EQUIPMENT

Keep engines tuned on all lawn equipment. When your mower is due for replacement, consider an electric model. On hot summer days, mow in the evening to reduce air pollution.



USE RECYCLED MULCH

Many organic products — from lawn clippings to coffee grounds — can help hold in moisture around trees and plants, either alone or mixed with traditional wood-chip mulch.

LIMIT CHEMICAL USE

Limit the use of outdoor chemicals, such as fertilizers and pesticides. Excess chemicals are washed into storm drains that flow into rivers and streams.

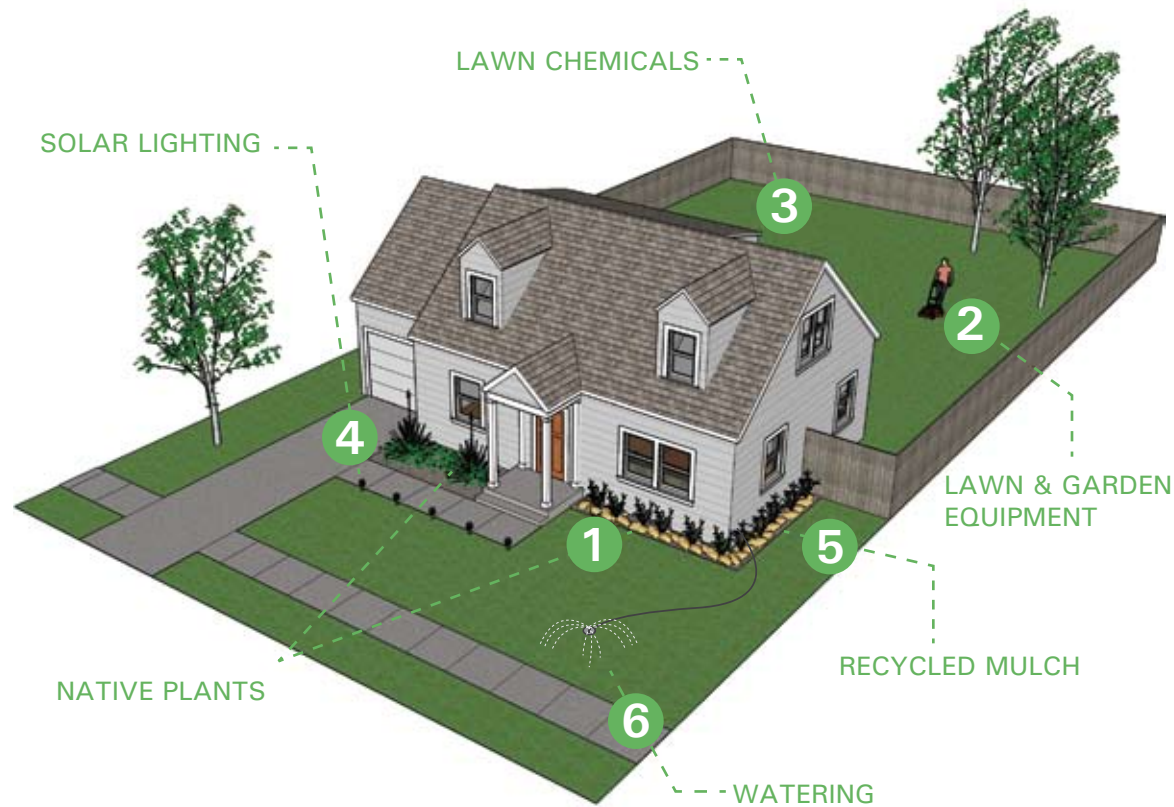


WATER EARLY OR LATE

Water your lawn in the early morning or in the evening. Avoid watering between 9 a.m. and 6 p.m., especially in hot weather, to reduce water waste through evaporation.



for the yard



MORE LAWN CARE BASICS

Instead of bagging the lawn clippings, let them compost in place, right on the lawn. As the clippings decompose, they deter weeds and act as a natural fertilizer.

Don't mow too short. Keep your lawn's height around three inches. Longer grass will crowd out weeds, shade the soil to reduce water evaporation, and encourage your grass to develop deeper roots.

Your lawn care choices affect more than your lawn.

Stormwater runoff from rain or melting snow washes all sorts of substances — excess fertilizer, pesticides, pet waste, oil and grease — into storm sewers that flow into streams and rivers.

Unlike sanitary sewers, the water from storm sewers isn't treated before it goes into streams. Polluted stormwater contaminates streams, rivers and lakes, and can kill or damage plants, fish and wildlife.



Help keep the water supply clean:

- Before you fertilize, test your soil to find out what it really needs, and don't overfertilize.
- Use lawn chemicals safely. Never apply before watering or rain unless directed.
- Pick up after your pets.
- Recycle used oil.
- Sweep driveways and sidewalks clean to keep debris out of storm drains.
- Wash your car at a car wash that filters wastewater or in a grassy area, not on your driveway.
- Never discard trash or yard waste down storm drains or in the street.

green basics

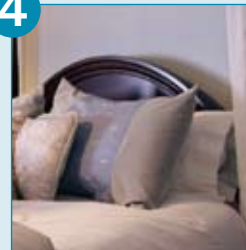
1



SWITCH TO COMPACT FLUORESCENT LIGHT BULBS

Replace burnt-out incandescent bulbs with compact fluorescent bulbs that last longer and use less energy. Changing just five of the most-frequently used lights in your home can save about \$25–35 per year.

4



USE ORGANIC COTTONS

Choose household linens made from organic cotton. Unlike ordinary cotton, which is treated with a variety of chemicals, organic cotton is grown without synthetic pesticides and fertilizers, hand-picked, and processed with natural dyes and finishes.

MAKE ROOM FOR RECYCLING

Set aside bins to separate and collect recyclable materials, including newspapers, office paper, plastic bottles, aluminum cans, cardboard and batteries. Check with your city or www.recyclespot.org to find out what you can recycle and where.

2



KEEP INDOOR AIR CLEAN

Use high-quality air filters to capture dust, pollen and other pollutants. Keep filters clean and replace them regularly. Common houseplants may help keep indoor air clean, too. Studies recommend one houseplant for every 100–150 square feet of living space.

5



3



ADD FAUCET AERATORS

Add aerators to faucets to save water — and the energy used to heat it — by reducing the flow from the faucet. Choose aerators that restrict water flow to one gallon per minute in bathroom sinks, and no more than two gallons per minute in the kitchen.

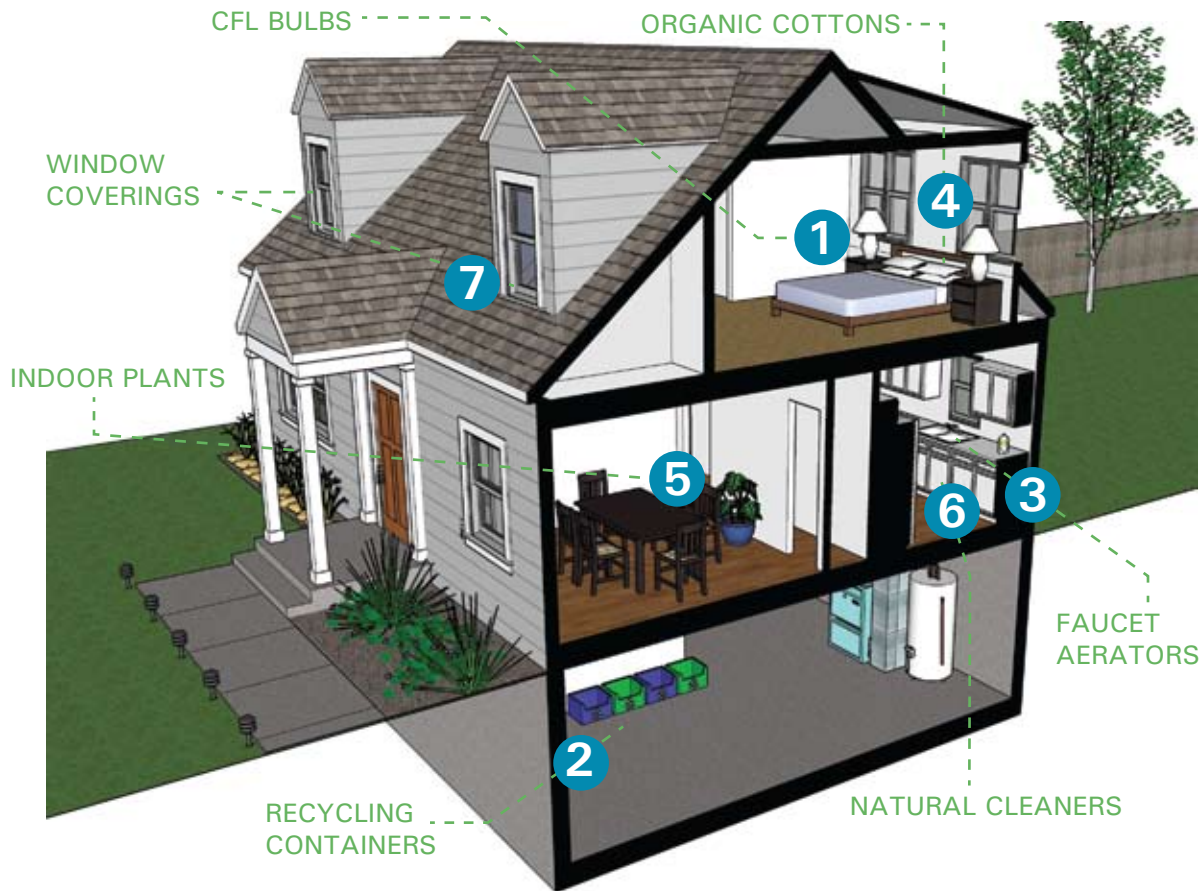
6



USE NATURAL CLEANERS

Use environmentally safe cleaning products. Look for cleaners that are labeled non-toxic and biodegradable. Avoid chlorine, phosphates and petroleum-based products. Get ideas for safe alternatives at www.marc.org/environment/solidwaste/hhw/saferalt.htm.

for the home

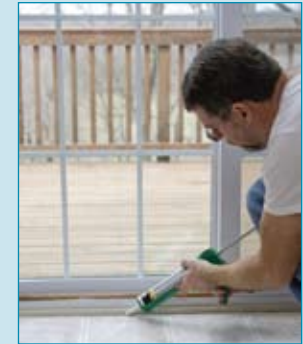


7 CONTROL LIGHT AND HEAT WITH WINDOW COVERINGS

Thermal or insulated window coverings can significantly improve energy efficiency and comfort. Choose window coverings that put nature to work for you by taking advantage of natural light. In winter, open south-facing window coverings during the day, and close all window coverings at night to retain heat inside. In summer, shade windows to help keep your home cool.

Weatherize your home to reduce heating and cooling costs.

Sealing air leaks is one of the quickest and least expensive improvements you can make to your home's energy efficiency.



Test for leaks by holding a lit incense stick next to doors, windows, outlets and other openings. If the smoke stream travels horizontally, you may have an air leak.

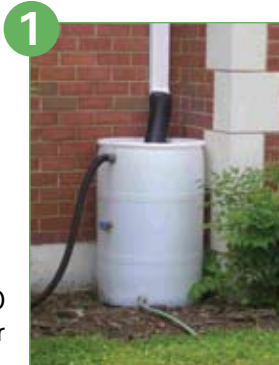
- Caulk and weatherstrip around windows and doors that leak air.
- Caulk and seal air leaks around plumbing and electrical wiring.
- Use rubber gaskets behind outlet and switch plates on exterior walls.
- Make sure your attic has adequate insulation.
- Keep fireplace flue dampers closed tightly when the fireplace is not in use. A fireplace plug — an inflatable polyurethane “pillow” that seals the chimney flue — is easy to install, and can be quickly removed to light a fire.
- Change your furnace filter regularly, and make sure that supply air registers and cold air return grills are clear of all obstructions so your heating and cooling system can move and condition air most effectively.

green elements

USE A RAIN BARREL

Make a rain barrel to collect and store rainwater from downspouts and use it to water your lawn or garden. Using a 55-gallon drum, a vinyl garden hose and some other common materials found at most hardware stores, you can create your own rain barrel.

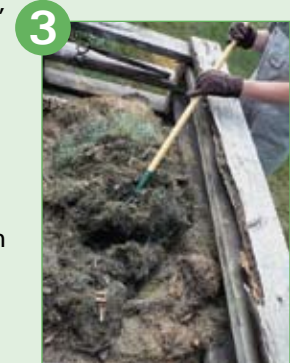
During the summer months, almost 40 percent of household water is used for lawn and garden maintenance. Using a rain barrel can lower your water bill and improve the vitality of plants, flowers, trees and lawns. Learn how to create a rain barrel at www.marc.org/environment/water/rainbarrels.htm.



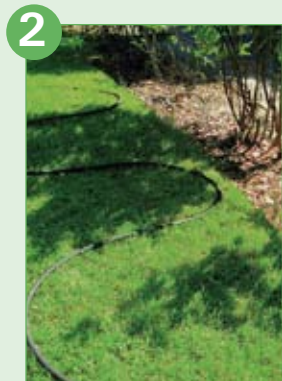
CREATE A COMPOST BIN FOR ORGANIC WASTE

Almost any organic material is suitable for a compost pile, from grass clippings to banana peels. Over time, with help from earthworms and other organisms, the organic matter you add to the compost bin will decompose into a useful soil supplement.

Place your compost pile or bin in a level, shaded, well-drained area, away from trees. Keep the pile about as moist as a well-wrung sponge and turn the compost occasionally to aerate. When it turns into a dark, crumbly humus, use it to enrich garden soil.



CHOOSE AN EFFICIENT IRRIGATION SYSTEM



Drip or trickle irrigation systems are more efficient than sprayers because they deliver water slowly and directly to the roots under the soil surface. This promotes deeper roots and a healthier lawn. If you use a sprinkler system, choose one that has a timer and sprays close to the ground.

For trees and shrubs, use soaker hoses at the base of plants to water the root system rather than the leaves and reduce evaporation.

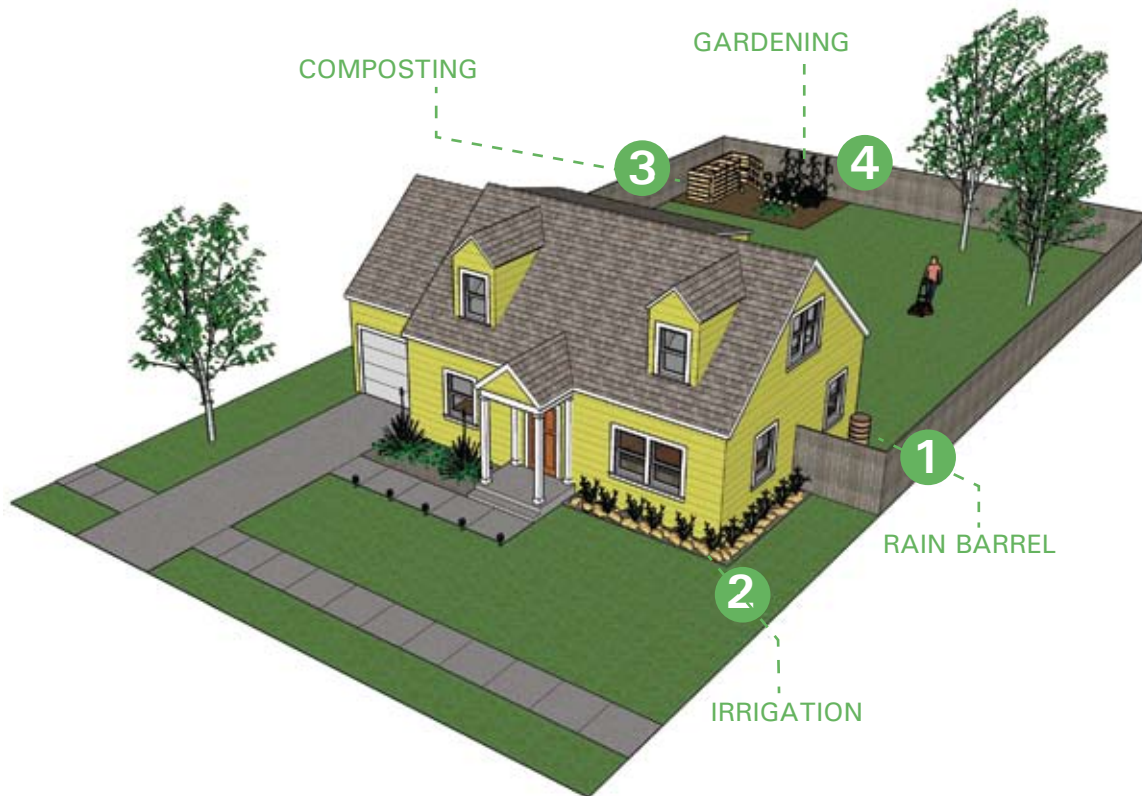
GROW YOUR OWN PRODUCE IN AN URBAN GARDEN



An enormous amount of energy is used to transport food from distant farms to the city and store and refrigerate it at supermarkets. We compound the energy use by driving to buy our groceries and returning home.

Many fruits and vegetables are easy to grow in a home garden or in containers. Even if you are not an expert gardener, you can enjoy fresh fruits and vegetables from your own garden and help the environment, too. Learn more at www.urbangardeninghelp.com.

for the yard



THE RIGHT TREE IN THE RIGHT PLACE

Trees can be an excellent long-term improvement to your home. Before you plant a tree, consider its overall size, shape and appearance, and choose a species that will thrive in our area. Avoid species that are known to be susceptible to ice damage or that have disease problems. Visit www.righttreerightplace.com for advice from the Heartland Tree Alliance on selecting, planting and caring for your trees.

Landscape for winter sun and summer shade

Strategically locating trees and shrubs with energy savings in mind can save heating and cooling costs.

- Plant deciduous trees — the kind that lose their leaves each year — on the southwest side of your home, about 20 feet away, to shade the summer sun.
- Plant trees on the north and northwest sides of your home to serve as winter windbreaks.
- If you plant trees on the south side, choose deciduous trees that will allow winter sun to shine through bare branches onto south facing windows.
- Shading your air conditioner unit with shrubs — planted three to four feet away — can increase the unit's efficiency by up to 10 percent.
- Choose evergreens for foundation plantings to block drifting snow and create dead air space that helps insulate your walls.
- To keep the air cooler in summer, keep paved surfaces to a minimum, or locate them where they will be shaded during the hottest parts of the day.



green elements

1



REPLACE WINDOWS

When it's time to replace your windows, choose high-performance windows that can save on heating and cooling costs. In the Kansas City region, look for a U-factor (heat-loss rating) below 0.40 and a Solar Heat-Gain Coefficient (SHGC) less than 0.55.

4



SEAL AND INSULATE

Air leaks can downgrade the effect of insulation. Sealing the leaks and adding insulation will make your home more comfortable and energy-efficient year round. Look for insulations that include recycled or bio-based content.

ENERGY-SAVING APPLIANCES

When buying new appliances, look for the ENERGY STAR label. Be sure to consider size, too. Don't buy a refrigerator or dishwasher that is larger than you need. If you choose natural gas appliances for their efficiency, be sure they are well vented.

2



KITCHEN COUNTERTOPS AND CABINETS

Use materials that have a high recycled content, but also consider durability. Cabinets can be made from compressed plant material, like wheatboard or strawboard. For counters, consider concrete, stone, glass tiles, wood or paper composite.

5



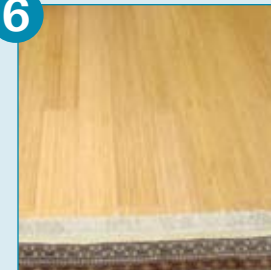
3



PLUMBING FIXTURES

If you need to replace pipes, choose copper or consider PEX tubing. When you install a new toilet, shower head or faucet, choose a low-flow model to save water.

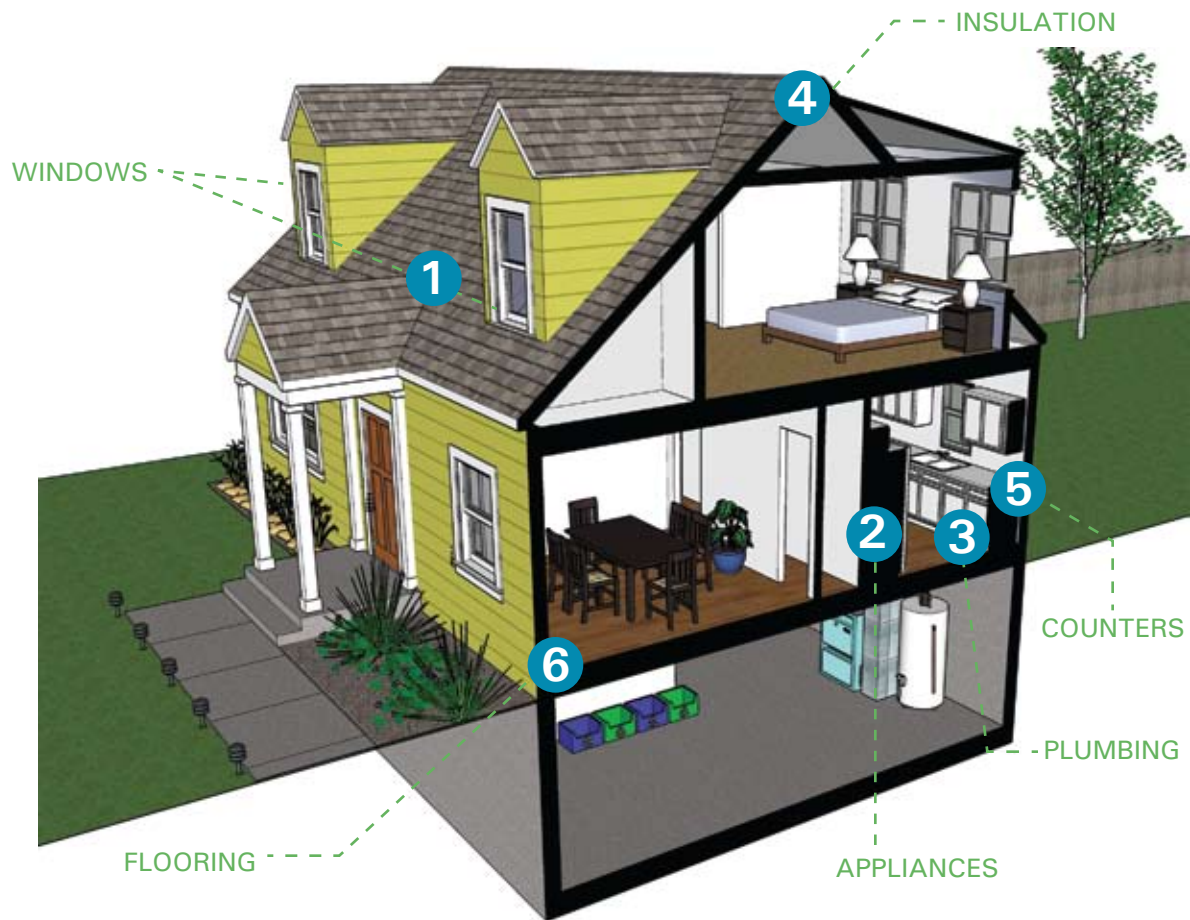
6



FLOORING CHOICES

Use certified woods for flooring. Bamboo is a durable, renewable alternative to traditional woods. Look for carpets that are made from natural fibers. In synthetics, choose carpet that has high recycled content or is made with little petroleum.

for the home



CHOOSING PAINT

Paints, stains and other coatings are the second largest source of polluting volatile organic compounds (VOCs), after automobiles. Paints also may contain toxic chemicals, such as formaldehyde. Manufacturers aren't required to list all of the ingredients on paint labels, so to be sure you're getting low-VOC, non-toxic paints, look for certifications such as the Green Seal label.



CHOOSING WOOD

Wood is a renewable resource, but not all wood comes from responsibly managed forests. Look for certifications such as the Forest Stewardship Council (FSC) label on wood and paper products. FSC certification ensures that the product comes from forests managed in accordance with strict environmental and social standards.



CONSTRUCTION WASTE

As you complete your remodeling project — whether it's as simple as a fresh coat of paint or as complex as a room addition — be sure to dispose of construction waste responsibly. Recycle as much as possible, and dispose of hazardous waste products safely. For more information on what to do with construction waste, visit www.recyclespot.org.

Use materials that are:

- clean or nonpolluting
- renewable
- abundant
- natural
- made with recycled content
- energy efficient
- locally obtained
- durable

green systems

1 PROTECT STREAMS WITH NATURAL BUFFER ZONES

If your property is adjacent to a stream, protect water quality and wildlife with a natural buffer zone. Let native trees, grasses and shrubs grow naturally, with little or no mowing, and without chemicals or pesticides. Stream buffers control erosion and help filter pollutants and sediment that might otherwise impact water quality.



3 DESIGN LANDSCAPES THAT NEED NO IRRIGATION

Xeriscape your lawn to save on watering and maintenance. Xeriscaping refers to landscaping in ways that require no additional irrigation — using plants with water requirements appropriate to the local climate and designing planting beds to avoid losing water to evaporation and runoff. Minimize turf areas to cut down on mowing, and use drought-tolerant grasses.



2 CREATE A RAIN GARDEN

Plant a rain garden in a depression — natural or dug — to capture and soak up stormwater runoff from your roof or other impervious areas around your home like driveways, walkways and patios.

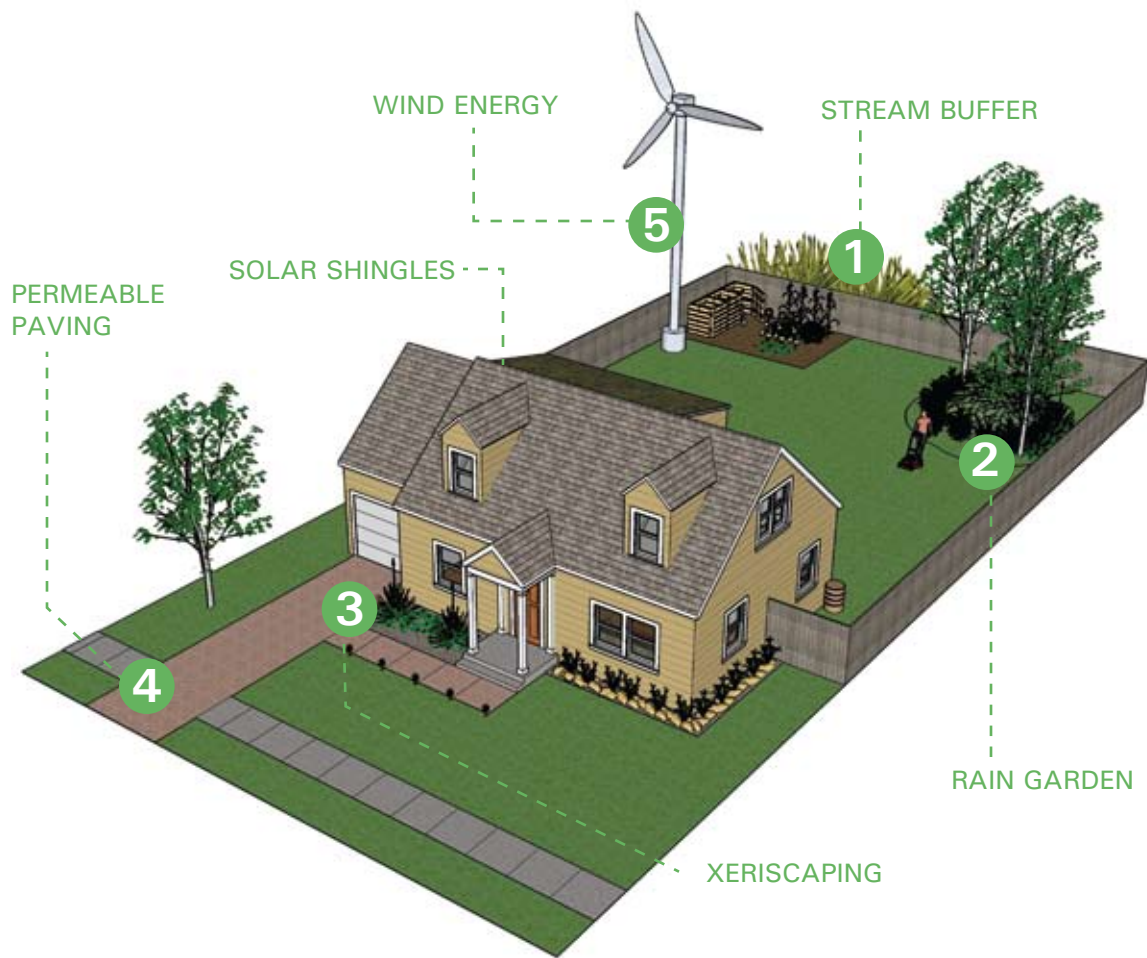
Fill your rain garden with suitable trees, shrubs, flowers and other plants for a beautiful addition to your yard that helps protect water quality. For more information, visit www.rainkc.com.



4 USE PERMEABLE PAVING

Consider permeable paving for patios and driveways. Porous pavement materials let air and water pass through, filtering pollutants on the spot and reducing the “heat-island” effect of traditional asphalt and concrete paving. Options include porous aggregate, open-jointed blocks, pervious concrete and porous asphalt. Porous pavement generally does not cost more, but it must be installed properly to be effective.

for the yard



WIND TURBINES

In remote or rural locations, using a wind turbine may offer savings of more than 50 percent on electricity costs. Small wind electric systems are cost-effective and nonpolluting.

Before installing wind turbines inside city limits, be sure to check your local zoning regulations.

Create your own power with solar shingles

Solar power for the home doesn't have to mean large — and sometimes unsightly — solar collector panels on top of your roof.

When it's time to replace your roofing, consider using solar shingles. At first glance, they look like regular asphalt shingles, but they contain photovoltaic cells that capture sunlight and transform it into energy. The energy generated by solar shingles can provide power to your home or to a utility's power grid.

Solar shingles should be mounted in a south-facing location. The number of solar shingles to install depends on the size of your home and how much electricity you want to generate.

Although upfront costs are higher, advanced solar systems should pay for themselves in savings in about five to seven years.



green systems

1



HVAC SYSTEMS

When you install a new heating and cooling system, choose the highest efficiency model you can afford. Make sure the system is sized right for your home, and be sure to seal the duct work. Keep ducts clean, and have your system checked every two years to make sure it is still operating efficiently. Check with local utility companies to find out if they offer incentives for installing high-efficiency systems.

3



ELECTRICAL SYSTEMS

If you need to update your home's electrical system, consider connecting to an alternative source of power such as solar or wind energy.

Even if you aren't able to install a solar system now, you may be able to make your home solar ready during your renovation by adding an empty, sealed conduit that runs from the electrical panel to the roof. This conduit will be available for wiring when you do add solar panels in the future.

HOT WATER HEATERS

Replace a worn-out water heater with an ENERGY STAR-rated tank. Or consider an even more efficient tankless or solar water heating system. Tankless (on demand) water heaters do not store hot water, so there is no stand-by heat loss — but they may not be viable for whole house use. Solar water heaters are very efficient, but may be costly to install. Whatever type you choose, get the right size system for your home and use.

2



DEMOLITION

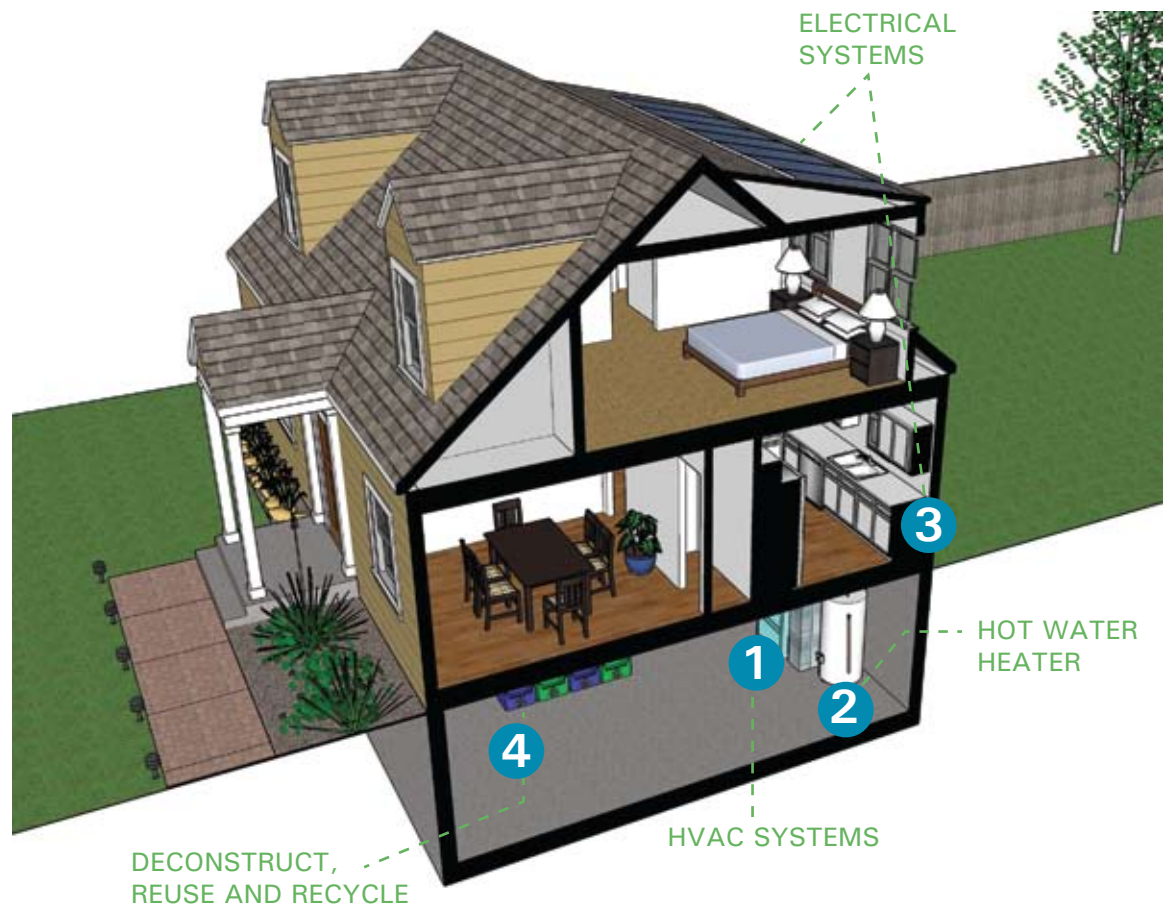
You can help the environment by minimizing the amount of waste generated during your remodeling project. By planning your remodel carefully and removing materials to retain their value (deconstructing rather than demolishing), you can increase the likelihood that materials can be reused.

Donate usable materials to Habitat ReStore (www.restorekc.org).

4



for the home



CONDUCT AN ENERGY AUDIT

Before you begin any renovation project or system upgrade, it's a good idea to conduct a comprehensive energy audit. A professional analyst can evaluate your home and prioritize improvement strategies based on fact, not guesswork. Energy-efficient improvements often enhance the durability, comfort and air quality of a home. The Metropolitan Energy Center, www.kcenergy.org, can help you locate a trained energy auditor or contractor. Many local utilities also provide services that will help you evaluate your home.

Adding on? Plan now to save energy later.

If your remodeling project involves a room addition, you have the opportunity to incorporate energy-saving options into your design from the beginning.

Place your addition to take advantage of natural light and reduce the need for electric light. Use passive solar strategies to help with heating and cooling costs.



Use large, south-facing windows for light and heat in the winter. To shade the windows in the summer, consider awnings or overhangs, or plant deciduous trees where summer foliage will offer shade.

Natural ventilation can also help with cooling costs. Install operable windows on the east and west sides of your addition to allow air to flow naturally. Doorways with transoms or louvered vents can help air flow from one room to another.

Whole-house fans and ceiling fans can be used to supplement natural air flow.

green contracting

Some remodeling projects are easy to do yourself, but others may require professional help. To find an environmentally responsible contractor, ask friends and neighbors for references and check online resources:

The Green Building Certification Institute • www.gbci.org

The U.S. Green Building Council provides this online directory of professionals certified in Leadership in Energy and Environmental Design (LEED)

National Association of the Remodeling Industry • www.nari.org

NARI provides a directory of member contractors that have gone through an extensive screening process and agree to abide by NARI's code of ethics.

When you choose a contractor for green remodeling, start with the basic questions you would ask any contractor about their skills, experience, licensing and references. Then ask specific questions related to green remodeling:

- Do you have any experience with green remodeling or sustainable design?
- What is your interest in green building? What are your areas of expertise?
- What memberships and certifications do you hold?
- What materials will you use? Where do they come from? What is their recycled content?
- What will happen with construction waste? How much will be reused or recycled?



Work with your contractor to:

- **plan your project**
- **develop a budget**
- **agree on a schedule**

green remodel checklist

where will you go green?

yard basics

- native plants
- solar-powered lighting
- lawn equipment
- recycled mulch
- limited chemical use
- watering early or late

home basics

- CFL bulbs
- recycling
- faucet aerators
- organic cottons
- indoor plants
- natural cleaners
- weatherization

yard elements

- rain barrel
- efficient irrigation
- urban gardening
- composting
- locating plants and shrubs for sun and shade

home elements

- replacement windows
- efficient appliances
- plumbing fixtures
- added insulation
- countertops and cabinets
- sustainable flooring
- certified wood
- low-VOC paint
- construction waste

yard systems

- stream buffer
- rain garden
- xeriscape
- permeable paving
- solar shingles

home systems

- HVAC systems
- hot water heater
- electrical systems
- wind power
- demolition
- ventilation
- orientation

shop sustainably

When you buy materials for your remodeling project — and when you shop for everyday items — consider the entire life cycle of each product:



RESOURCE MATERIALS

Think about what materials went into the product. Is it made with renewable resources, like organic cottons, and FSC-certified wood? Was the material grown without synthetic pesticides and fertilizers?



MANUFACTURING

Was the product manufactured in an environmentally responsible manner? Buy from businesses that minimize waste and limit pollution in the manufacturing process.



TRANSPORTATION

Buy locally to reduce the energy needed to transport goods to market. When you shop, combine small errands into one trip and carry your purchases in reusable shopping bags.



DISPOSAL

When you buy something new, think about how long it will last and how you will eventually dispose of it when it has outlived its usefulness. Is it easily recyclable, or can it be reused? Before you dispose of waste, look into recycling and reuse options. Be sure to dispose of hazardous waste safely.

LOOK FOR LABELS LIKE THESE:



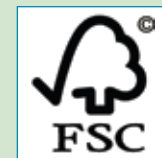
The ENERGY STAR label identifies appliances and other products that meet government standards for energy efficiency.



The Water Sense label identifies products and programs that meet EPA water efficiency and performance standards.



The Green Seal label marks products that meet independent standards for performance and environmental responsibility.



Forest Stewardship Council certification identifies wood and paper products from forests managed under strict environmental standards.



Look for products that have a high post-consumer recycled content and can be recycled after use.

online resources

10,000 Rain Gardens

www.rainkc.com

American Public Works Association (Kansas City Metro Chapter) Best Management Practices Manual

www.kcapwa.net/kcmetro/Specifications.asp

Bridging the Gap

www.bridgingthegap.org

Compost Guide

www.compostguide.org

Energy Efficiency and Renewable Energy

www.eere.energy.gov

ENERGY STAR

www.energystar.gov

EPA Watersense

www.epa.gov/watersense

First Suburbs Coalition

www.marc.org/firstsuburbs

The Green Home Guide

www.greenhomeguide.org

Habitat for Humanity ReStore

www.restorekc.org

Heartland Utilities for Energy Efficiency

www.huee.org

Home Builders Association of Greater Kansas City (Resources for Contractors)

www.kchba.org

Kansas City Power & Light Energy Efficiency Programs

www.kcpl.com/residential/hee.html

Low-Impact Living

www.lowimpactliving.com

Mid-America Regional Council Environmental Programs

www.marc.org/environment

Metropolitan Energy Center

www.kcenergy.org

National Association of Home Builders Green Building Program

www.nahbgreen.org

National Association of the Remodeling Industry (NARI)

www.nari.org

www.remodelingkc.com

Recycle Spot

www.recyclespot.org

U.S. Green Building Council

www.usgbc.org

www.usgbckansascity.org



The nationally recognized *First Suburbs Coalition Idea Book* for updating Post-World War II homes was published in 2005. The book examines four of the most common housing types found in Kansas City's first suburbs — Ranch, Split Level, Two Story, and Cape Cod — and provides dozens of ideas for appropriate ways to update and make additions to them.

The 40-page, folio-sized book offers color illustrations of each housing type and the elements which can be renovated or added. The book also addresses windows, doors and garages, as well as other basics of exterior appearance. Energy efficiency, financing and universal design are discussed, along with a section of guidelines for selecting and working with reliable contractors.

Order the *Idea Book* online (\$10 plus shipping) at www.marc.org/firstsuburbs.

MARC



Mid-America Regional Council

600 Broadway, Suite 200
Kansas City, MO 64105
816/474-4240
www.marc.org