

## December 2015 Green Living Segment

For many, the holidays are a time of joy, gifts, and family togetherness. Unfortunately, the myriad of emotions we experience can cause us to put our habits regarding saving money and resources aside to fulfill the perceived wants and needs of those we know and love. But regardless of our station in life, the holidays can be a time of abundance and good will, each built on a foundation of green living and environmental stewardship.

As our friends at wikiHow point out, celebrating a green Christmas (or Hanukkah) and New Year isn't about going without. <http://bit.ly/1BcgpCX> It's simply about not being wasteful as we celebrate. Respecting the occasion and the environment can benefit your wallet, sanity and happiness, as well as nature and the world around us. So, there are plenty of good reasons to celebrate a green Christmas this year and every year.

Holiday traditions are often passed down from one generation to the next. Some families blend new ones with those they cherish from the past. In each case the habits we form can have a lasting influence on how we celebrate the holidays, so it is important that they are wholesome and environmentally responsible. Here are a few suggestions from wikiHow and myself to get your green holiday season started. I'm sure you're bound to come up with many of your own.

**Reflect on the meaning of Christmas for you and your family.** If the meaning of Christmas is lost under the crush of excessive spending and the pressure to prepare for it, taking on debt, boastful exchanges of audacious gifts, or the feelings of anger and deprivation when gift recipients can't have "what they want", it's difficult to celebrate with a happy heart. Whether you celebrate [Christmas](#) for religious reasons or as part of a secular tradition, an excessively commercial Christmas is neither green nor fulfilling. Reining in excesses isn't about depriving anyone of the enjoyment and beauty of giving. Rather, it's about nurturing the real spirit of Christmas with appropriate gifts and gestures, decorations, food, and other traditions in a way that is considerate of family, the environment, and what Christmas is truly about.



*Christmas... what does it take to be merry?*

**Spend time with friends and family.** One of the key problems at Christmas is the lack of time we have to get everything done, and the excuses we make as a result. It's easier to shop at a convenience store and buy excessive amounts of holiday merchandise made from resource-intensive materials shipped from far away; they're inexpensive, plentiful, and convenient. But stocking up with cheap merchandise at the last minute smothers the joy of sitting down together as a family to craft our own traditional decorations, cards, gifts, etc., from materials that are renewable or recycled. Gone is the creation of hand-made family heirlooms that can be passed down to others. While it is unrealistic for most busy families to handcraft everything, making a little time on your family's calendar to make a few things by hand can create a new family tradition, and give everyone involved a sense of personal pride and achievement at having contributed something for the holidays. I can speak from experience the time spent making things with children and the elderly has multiple benefits. First, few things are more important than giving loved ones time and attention, especially when things are hectic. Second, the gifts children and our elders make for family and friends relieves the anxiety of not having money to spend while building a healthy sense of pride and self-esteem. This could be something as simple as making this year's cards from last year's cards, making gift tags from old cards, sewing felt toys, making 3D snowflakes, etc.; anything that those participating will enjoy doing.

Another aspect of allotting time is the willingness to extend getting together beyond Christmas day. Be gracious about making demands for everyone to be together at the same place and time. Celebrating "the season" instead of focusing on one day can be a very precious gift to family pulled in different directions over long distances. I know removing the guilt associated with not being able to stay the weekend before or after Christmas instead of just visiting Christmas morning or afternoon for a few hours makes for a much more enjoyable get together.



*There's no need to cram everything into Christmas Day*

**Choose the most eco-friendly Christmas tree option for you.** The Christmas tree debate is a difficult one that needs to be resolved according to your own conscience. Some people choose artificial trees because they can be reused. Their downside is a sometimes limited lifespan, the need to be replaced when they wear out, and being made from non-renewable resources. Cutting down living trees from forests is only sustainable where it involves harvesting trees that are going to be removed anyway or where the forest was created just for the purpose, such as on managed Christmas tree farms. Yet, some people are concerned that even with a Christmas tree farm, there might be an issue if industrial chemicals were used rather than eco-friendly growing options, or if monoculture is replacing local [biodiversity](#). Always ask how the farm is managed to find out if eco-friendly practices are being used. Or,

- Consider purchasing a [living Christmas tree](#). This option has the benefit of not removing a tree for a temporary use and allows you to plant the tree in the garden or in another suitable place after use. Read [How to choose a living Christmas tree](#) for details on how to choose a suitable tree.
- Be sure to compost a cut tree after use. If you don't have a garden or you're not able to hire or borrow a wood-chipper machine, check with your local council to see if it has a scheme for chipping or [composting](#) trees. Many municipalities in North America have taken to collecting trees for direct chipping and composting rather than simply dumping them at the tip.
- Avoid overdoing the plastic decorations and the cheap discount store decorations. Affordability doesn't mean you should indulge in them – and don't forget the clutter you'll end up with in storage! Cheap decorations come at a high environmental cost, while simple and fewer decorations can be very effective and elegant.
- Turn off the tree lights after you go to bed and while you're out. Try putting your indoor and outdoor lights on timers if you can't remember to do this manually. Doing this will also [prevent fires](#).



*Homemade decorations give children a sense of fulfillment and participation in the holidays.*

**[Make your own decorations.](#)** If you've managed to allot some time, make as many Christmas decorations as possible. Making your own decorations is fulfilling because it's personal and lets you use your hands and imagination to the fullest extent. Children often love to make decorations, which certainly can qualify as gifts, adding to their sense of fulfillment and participation in the Holidays. Remember, the idea isn't to compete with commercially mass produced decorations; it's simply about making *your* decorations, not making them expertly. There is a lot you can do at home with existing materials or using recycled materials, and many of these things don't take much time:

- Use recycled materials (such as colored paper, old magazines, ribbons, etc.), reuse old decorations and build on them, to create decorations. Read wikiHow's [Christmas decorations category](#) for a whole range of inspiring crafty how-to ideas.
- Make edible ornaments. Half the fun is [cooking](#) them, eating bits as you go, and decorating them. The other half is admiring your handiwork spinning on the tree. Ideas include popcorn and cranberry strings, or simply stringing these food items onto thin gauge wire and shaping it into stars, hearts, etc. And [cookie ornaments](#) in all sorts of Christmas shapes are a lot of fun kids.
- Use the garden or natural items from the outdoors for ornaments. Collect pinecones, twigs, berries, sprigs of evergreen plants, red apples, oranges, etc. to create [wreaths](#), centerpieces, and simple ornaments. Clusters of pinecones, berries, and evergreen pieces can beat their plastic counterparts hands down. After Christmas, simply toss them back outdoors, no need to clutter your house storing them.

**Make your own gifts.** Like decorations, making your own gifts at Christmas is an excellent way of ensuring they're eco-friendly and well within budget. There are many possibilities but the important thing is to draw on your own strengths and talents and have fun, so that whatever you make is enjoyable for you and results in a gift-worthy item for the recipient. For example, if you have kids, consider making a [puppet theater](#) or [toys and dolls](#). Read [How to make your own Christmas gifts](#) for more ideas.

- *Make food.* Giving homemade food beautifully presented in eco-friendly packaging is a delightful gift, part love and part delicious! How about [homemade jam](#) or [bread](#)? Read wikiHow's [Christmas cooking category](#) for more ideas.
- *Consider putting together cherished items to make an album.* Albums aren't just for photos, although a [photo album](#) that has had your personal time lavished on creating it can be a great gift in itself, too. Use albums to collect family loved recipes, vacation collectibles, craft patterns, science project instructions, detailed suggestions for a future family vacation, scrapbook mementos, trading cards collected from cereal boxes, etc.
- *Give the gift of time.* Could someone you know use help around the house? Would someone love to learn something that you could teach? Make homemade coupons or promise certificates, and be sure to follow up on what you've promised!

**Buy eco-friendly gifts if you aren't making them.** There are plenty of "green" gifts. Check out the many online eco-focused stores or visit stores offering eco-friendly gift options, including such items as durable water bottles, organic clothes for babies to adults, books, [recycled paper](#) products, etc.

- Another great gift idea is donating money to charity. Even small donations to a legitimate charity can make a difference can make a difference. It can be a family choice if wished, with all of you choosing the gift online and having it sent in your family's name.
- Buy garden products. Things to till the garden with, seeds, [seedlings](#), plants, planter pots, soil, etc., are great eco-friendly gift choices. Be sure to choose plants wisely – opt for natives and locally grown varieties and food crops over exotics. Heirloom seeds can be an enormously successful gift for a garden-lover. You also can give potted plants as presents, including those that could be the beginning of a container garden.
- Reusable grocery and shopping bags are always handy.
- Biodegradable, organic, and health conscious cosmetics, body and bath products are a burgeoning industry now, including soaps, shampoos, bath oils, bath salts, perfumes, etc., that are made from ingredients known to be safe to both humans and the environment. Making up a small basket of such products can be a great way to introduce a friend or family member to new products that have less impact on their health and the environment.
- For a young couple with a baby, pay for a diaper service to spare them endless diaper washing and to gift them away from disposables a bit longer.
- For kids, think science kits, [solar power](#) gadgets such as radios and flashlights, books about ecology, or tickets for a trip to a local nature reserve, museum, or zoo to see conservation in action.

Think about gifts that can help family and friends whose eco-consciousness is newly emerging. I recently purchased one of my favorite books on sailing for a friend for a penny online. It was listed as "used in excellent condition" and the postage was only a few dollars. Or, buy inexpensive items they can start using and noticing benefits from immediately. A [water-saving](#) device for the toilet, a

solar light, a programmable thermostat, insulation, hose nozzles that shut off automatically, etc., can be very reasonable. People often consider but don't always take the next step to purchase common household items for themselves. This is a great way to enable them practically. These gifts become very special when you offer to install them. Be sure to explain energy savings they'll experience, if relevant!

**Be considerate of paper.** There is a lot of waste involved with cards, gift tags, and wrapping. Any eco-conscious gift recipient will know the unpleasant feeling of virgin paper ripped off gifts and tossed aside, never to be thought of again. Avoid this dilemma by making eco-friendly wrapping choices from the outset.

- Recycle cards. Read [How to put old greeting cards to use](#) for more ideas, such as making new cards from old, and making gift tags from old tags. And don't forget to use your origami skills to turn old cards and paper into new tags!
- Use recycled [wrapping paper](#). Look for paper products that state they're recycled, or use simple recycled brown packaging paper and make it more interesting by adding decorative elements of your own. Involving children in sticking on old cards, or drawing on the wrapping gives them a sense of belonging and a memorable shared experience. Old magazines and newspapers, posters, or paper bags can also make stylish wrappings. I like using the comics sections of newspapers. The paper is colorful and fun, and makes a great gift-wrap.
- Make tags from recycled items.
- Reduce the number of cards sent by using electronic cards over the Internet. This can also save you time as you don't need to buy or make cards, address the envelopes, add the stamp, etc. Importing personal images, family photos or other graphics that can be saved by the recipient can make emailed cards welcome. Be aware that some people won't like e-cards, especially older people who continue the tradition of card sending, so be sure to send them a real card.
- Challenge yourself to use ribbon and string instead of tape. Tying with [ribbon](#) adds an elegant, traditional touch to gift giving. For a pet, try wrapping with a leash or collar.
- Use an item of clothing, fabric, a bandana, a handkerchief, a scarf, or a tea towel to wrap gifts in. This saves on paper completely and looks really pretty and novel sitting under the tree. The wrapping is a gift and won't be tossed away. Other ideas include placing the gift inside a cookie jar, mug, pillowcase, lunchbox, tote bag, bucket (great for garden gifts), flower pot, etc. And quilters love receiving gifts wrapped in quilting fabric!

**Buy locally grown food.** Christmas is the ideal time to buy locally. Visit your local farmers' market. The food will be fresher and the shorter transportation distance from field to fork will significantly cut down on carbon emissions.

- Avoid buying food that is overly packaged. Items bought loose or in bulk will taste just as good as their cellophane-wrapped competitors.
- Minimize your food waste by not buying excessive amounts. Simply confirming how many people are eating will prevent you from preparing too much. Avoid throwing out any leftovers. The majority of foods can be kept for several days if refrigerated.
- Consider having more vegetarian food at Christmas. Eating more grains, vegetables, and fruit is not only healthy but will help to reduce your energy consumption. Meat takes a lot more water and energy to produce than plant foods.



*Supporting local farmers is a good idea any time.*

**Lastly, if you don't have one, create a [recycling center](#).** The main sources of extra rubbish during Christmas are all things that can be recycled – [bottles](#), cans, paper, packaging and cards. Check with your municipality to find your nearest recycling center, or to see which days they collect. Don't forget this may differ from usual over the festive period. If you have any unwanted presents, don't discard them, donate them to your local charity shop instead.

Clearly, there are many ways to have a very merry, green Christmas. 84 Lumber and GreenEdge Supply share your interest in living green all year long and carry a number of products and materials that can contribute to that goal. Visit us online at [www.greenedgesupply.com](http://www.greenedgesupply.com) or stop into one of our retail stores and let our sales staff help you to have the best holiday season ever.

"How to have a green Christmas." *wikiHow*. 02 December 2015. <http://www.wikihow.com/Have-a-Green-Christmas>

### October 2015 Green Living Segment

Growing up the son of a carpenter / contractor I was always around construction sites, other contractors and subcontractors. This continued into college where I worked construction, including two years working out of a Man Power labor pool in Atlanta, Georgia. Suffice it to say, I got as much of my education as an architect from working construction as I did from any aspect of my college experience. I have fond memories of those years, and still enjoy any number of do it yourself projects, both large and small.

Along the way I became a regular viewer of Bob Villa's *This Old House* program. The program has evolved over the years, and has spun off some great sequels, most notable Norm Abram's *The New Yankee Workshop*. All of the cast members are steeped in years of experience, common sense and skills any homeowner can appreciate and learn from. The variety of home construction and improvement projects the shows have covered is truly impressive, and they have never failed to teach me something that I can apply to my professional practice or home improvement projects.

One thing I've learned from watching the shows is there is both a best *time* to do home construction and renovation projects. Many are influenced by the weather and the number of available daylight hours, especially if they involve outside tasks. One piece of advice I remember from watching the shows is when it comes to changing seasons (and changing conditions) it is better to do things earlier than later. While we revel in the beauty of early autumn and long to extend our summer activities as much as possible, we should be mindful that cooler days and shorter daylight hours are fast approaching. It's wise to take advantage of mild weather and the ability to work outside as long as possible when doing winter weatherization projects. This makes October a good month for getting ready for winter, as it is best to prepare your home for winter before the first frost. By being proactive, you'll lower your energy bills, increase the efficiency and lifespan of your home's components, and make your property safer.

How much we need to do depends on a number of factors – whether we own or rent where we live, the characteristics of our home – site, age, condition, type of heating and cooling systems, etc., - whether what we need to do can be done without professional help, and our budget, among others. To help us with what we need to consider I am including the *Winter Preparation Checklist* developed by Bob Villa, much of which resonates with green living goals. <http://bit.ly/1ho8L3c>

#### Windows and Doors

- Check all the weatherstripping around windows and doorframes for leaks to prevent heat loss. Replace weatherstripping if necessary.
- Replace all screen doors with storm [doors](#).
- Replace all window screens with storm windows.
- Examine wooden window frames for signs of rot or decay. Repair or replace framing to maintain structural integrity.
- Check for drafts around windows and doors. Caulk inside and out, where necessary, to keep heat from escaping.
- Inspect windows for cracks, broken glass, or gaps. Repair or replace, if needed.

#### Lawn, Garden, and Deck

- Trim overgrown branches back from the house and electrical wires to prevent iced-over or wind-swept branches from causing property damage or a power problem.
- Aerate the lawn, reseed, and apply a winterizing fertilizer to promote deep-root growth come spring.
- Ensure rain or snow drains away from the house to avoid foundation problems. The dirt grade – around the exterior of your home – should slope away from the house. Add extra dirt to low areas, as necessary.
- Clean and dry [patio furniture](#). Cover with a heavy tarp or store inside a shed or garage to protect it from the elements.
- Clean soil from planters. Bring pots made of clay or other fragile materials indoors. Because terra cotta pots can swell and crack, lay them on their sides in a wood carton.
- Dig up flower bulbs, brush off soil, and label. Store bulbs in a bag or box with peat moss in a cool, dry place for spring replanting.
- Remove any attached hoses and store them away for the winter to prevent cracks, preserve their shapes, and prolong their life. Wrap outside faucets with covers to prevent water damage.
- Shut off exterior faucets. Drain water from outdoor pipes, valves, and sprinkler heads to protect against pipe bursts.
- Inspect decks for splintering, [decay, or insect damage](#) and treat, if needed, to prevent further deterioration over the winter.

- Clean leaves, dirt, and pine needles between the boards of wooden decks to thwart mold and mildew growth.
- Inspect outdoor lighting around the property. Good illumination will help minimize the chance of accidents on icy walkways at night.
- Check handrails on exterior stairs to make sure they are well secured.

### **Tools and Machinery**

- Bring all seasonal tools inside and spray them with a coating of lightweight oil to prevent rust.
- Weatherize your lawn mower by cleaning off mud, leaves, grass, and debris.
- Move your snow blower and shovels to the front of the [garage](#) or shed for easy access.
- Prepare the snow blower for the first snowfall by changing the oil and replacing the spark plug.
- Sharpen ice chopper and inspect snow shovels to make sure they are ready for another season of work.
- Make sure you have an ample supply of ice melt or sand on hand for steps, walkways, and the driveway.

### **Heating, Ventilating, and Air Conditioning**

- Inspect the firebox and flue system to ensure that they're clean of any soot or creosote and that there aren't any cracks or voids that could cause a fire hazard.
- Check fireplace for drafts. If it's cold despite the damper being closed, the damper itself may be warped, worn, or rusted. Consider installing a Chimney Balloon into the flue to air seal the area tightly.
- Clean or replace the air filter in your furnace for maximum efficiency and improved indoor air quality.
- Clean your whole house humidifier and replace the evaporator pad.
- Bleed valves on any hot-water radiators to increase heating efficiency by releasing air that may be trapped inside.
- Check that smoke alarms and carbon monoxide detectors are in working order.
- Remove air conditioners from windows or cover them with insulated liners, to prevent drafts.
- If you have an older thermostat, replace it with a programmable unit to save on heating costs.
- Install foam-insulating sheets behind outlets and switch plates on exterior walls to reduce outside airflow.
- Make sure fans are switched to the reverse or clockwise position, which will blow warm air down to the floor for enhanced energy efficiency and comfort.
- Flush a hot water heater tank to remove sediment, and check the pressure relief valve to make sure it's in proper working order.
- Examine exposed ducts in the attic, basement, and crawl spaces, and use a sealant to plug up any leaks.

### **Gutters, Roof, and Drains**

- Check for missing, damaged or warped shingles and replace, as necessary before you get stuck with a leak.
- Check for deteriorated flashing at the chimney, walls, and skylights and around vent pipes. Seal joints where water could penetrate, using roofing cement and a caulking gun.
- Check the gutters and downspouts for proper fastening, and re-secure if loose or sagging. The weight of snow and [ice](#) can pull gutters off the house.
- Clean gutters of any debris. Make sure downspouts extend away from the house by at least 5 feet to prevent flooding of the foundation and water damage from snowmelt.
- Clean leaves and debris from courtyard and pool storm drains to prevent blockages.
- Ensure all vents and openings are covered to prevent insects, birds, and rodents from getting inside to nest in a warm place.

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### **August 2015 Green Living Segment AC or no AC. Do we really need it?**

In my June 2015 *Green Living Segment* I mentioned that I recently moved to a small cottage in the woods of a day camp north of Pittsburgh. I must confess the move has been beneficial for me in many ways, and continues to present a number of pleasant surprises. One of these is the ability of the cabin to stay cool during recent stints of hot, humid weather. I contribute this mainly to

simply being well shaded by the mature oaks that surround me. Other features that contribute to remaining cool during hot summer days are deep overhangs that shade very modest south facing windows, interior shades to block late afternoon sun, a well-insulated and ventilated roof structure and ceiling fans that do a great job of “peak shaving,” when things get a little warm. I enjoy sleeping in the lower level of the cabin, which is naturally cooler than the upper level living area, and which provides the safety of direct access to grade. I work with the diurnal cycles by keeping the place closed and shaded when I know it is going to be hot during the day, and opening the structure to the cool night air when conditions allow for natural cooling. Running a small dehumidifier briefly when humidity (infrequently) goes above 65% is all I need to remain cool and dry. Most of all, I enjoy being able to sit and work outside under roof on my deck when the weather allows; just as I am doing as I write this. I know many of the conditions that are keeping me cool also make the cottage a less than optimum passive solar home, but it’s the beginning of August, and so far so good with keeping comfortable.

I’ve never really liked air conditioning. We never had it growing up, and I seem to have both a tolerance and temperament that doesn’t need it. I’ve been fortunate to work in many countries around the world where the indigenous, vernacular architecture evolved before the automobile, the elevator and the air-conditioning. Collectively this has contributed to buildings and communities well suited for the microclimates within which they reside. Conversely, the emergence of mechanical space conditioning combined with relatively inexpensive energy since the advent of air conditioning has precipitated an expectation of uniform, closely controlled interior conditions that ignore any exterior influence, good or bad. Many blame AC for the disappearance of the traditional front porch and the associated social intimacy that contributed to safe communities. We have retreated indoors, and have become distant from our neighbors. In the worst case, the practice of wide open, over cooled commercial establishments with doors wide open to the side walk, and super cooled work environments where occupants dress to stay warm illustrate how far we have devolved. I’ve never understood walking past a restaurant with the overhead door flung open, cooling the adjacent street. My time living and working in south Florida and New Orleans tells me these establishments are quite common.



*Very inviting, but does it justify air-conditioning the street?*

Conversely, I have never seen the same anywhere I’ve been in Europe. While the weather in Washington, D.C., and Berlin, Germany, has been pretty similar recently, there is a significant difference between the two capitals. That is, many Americans would probably never consider living or working in buildings without air conditioning, while many Germans think life without climate control is far superior.

The divide isn’t limited to Berlin and D.C. Many Europeans visiting the U.S. frequently complain about “freezing cold” temperatures inside buses or hotels. American tourists have been stunned by Europeans’ ability to cope with heat, including work spaces or in their private homes.

Overall, it’s safe to say that Europe thinks America’s love of air-conditioning is actually quite daft. <http://wapo.st/1KL4Laj> Europeans have wondered about the U.S. addiction to AC for some time. In 1992, Cambridge University Prof. Gwyn Prins called America’s love of air-conditioning the country’s “most pervasive and least-noticed epidemic,” according to [the Economist](#). And,

according to the [Environmental Protection Agency](#), it's getting worse: American demand for air-conditioning has only increased over the past decades. Most builders I know will not consider not installing it, for fear their new home offering simply will not sell.

The U.S. has been the world's leader in air-conditioning ever since, and it's not a leadership Americans should necessarily be proud of. According to Stan Cox, a researcher who has spent years studying indoor climate controlling, the United States consumes more energy for air conditioning than any other country. In many parts of the world, a lack in economic development might be the reason for a widespread absence of air-conditioning. However, that doesn't explain why even most Europeans ridicule Americans for their love of cooling and lack of heat tolerance.

Of course, Northern Europe is still colder than most regions within the United States and some countries, such as Italy or Spain, have recently seen an increase in air-conditioning. "The U.S. is somewhat unusual in being a wealthy nation where much of the population lives in very warm, humid regions." However, the differences in average temperatures are unlikely to be the only reason for Europeans' reluctance to buy cooling systems. It's also about cultural differences. Americans prefer an average temperature of 70 degrees, while Europeans consider such temperatures too cold. Michael Sivak from the University of Michigan says. "Americans tend to keep their thermostats higher in summer and lower in winter. In contrast, Europeans tend to set their thermostats higher in summer and lower in winter. Consequently, while indoors, Europeans wear sweaters in winter, while Americans wear sweaters in the summer," Sivak told the Washington Post. Furthermore, Europeans are generally more used to warmer room temperatures because most of them grew up without any air-conditioning.

In Europe energy prices are generally higher. Cooling uses much more energy than heating, which is why many Europeans prefer sweating for a few days over continuously suffering under the effects of global warming in the future. There are certainly advantages of air-conditioned rooms even Europeans can't easily dismiss, and studies clearly show that cooling improves work efficiency during summers as well as sleep patterns. It may even reduce mortality. So why would Europeans simply relinquish such advantages?

Simply stated, not using air-conditioning doesn't necessarily mean that one has to be uncomfortable. According to the *New York Times*, E.U. regulations force companies to construct their workspaces more energy-efficiently, minimizing the need for mechanical space conditioning. Moreover, air-conditioning in the U.S. may have more indirect but nevertheless dangerous impacts; whereas, Europeans have decided to simply accept the existence of hot days and nights, according to the *Economist*, American architects have been forced to ban balconies and porches from many work spaces to lower ceilings in buildings to keep as much cold air indoors as possible. In other words, whereas Americans might be more productive in air-conditioned work environments, they are also more likely to be stressed.

America's addiction to air-conditioning may also have another negative side effect: it will make it harder for the U.S. to ask other countries to continue to abstain from using it to save energy. "The bottom line is that America's a big, rich, hot country," Cox told The Post. "But if the second, fourth, and fifth most populous nations – India, Indonesia, and Brazil, all hot and humid – were to use as much energy per capita for air-conditioning as does the U.S., it would require 100% of those countries' electricity supplies, plus all of the electricity generated by Mexico, the U.K., Italy, and the entire continent of Africa," he added.



Wrap around porches, reflective colors, double hung windows,

*exterior shutters and shade trees all contribute to passive cooling.*

Modern air conditioning was invented in the 1920s. It didn't become a common home feature until the latter half of the 20<sup>th</sup> century. <http://bit.ly/1OunK6O> Before then our grandparents survived hot, steamy summers in homes that had a few strategic features to help them stay cool without AC. Mary Wheeler Schap, an architect who restores historic buildings in Cincinnati, OH, offers the following expert insight into features that made older homes livable in hot weather. I'm pleased to say I lived in a great example of one while attending the University of Cincinnati. Many of these examples can be applied to new green home design and renovations.

- *Airflow* – In northern states, it was common to create a “stack effect” by opening windows in the basement and top floor. This generated a cool breeze throughout the house. Further south, before AC, many homes were built on blocks, allowing breezes to flow underneath and help keep them cool all summer long.
- *Tall ceilings* – Ceilings as high as 10, 12, and even 14 feet were common in older homes. As heat rose to the ceiling, lower areas stayed cool and comfortable. Ceiling fans – powered by electricity or elaborate rope systems – also facilitated air movement.
- *Transoms* – A transom – a small window over a door – allowed warmer air at the ceiling to circulate up to higher floors, providing more air movement throughout the house. Transoms over exterior doors often had hinges and special hardware. This allowed for easy access to open and close, helping create airflow while still providing security.
- *Large windows* – Many older and historic homes had large, double-hung windows. Opening the top sash would allow hot air near the ceiling to escape. Opening the bottom sash, especially at night, allowed cool air to flow inside. Rooms had many windows, some as large as doors. Thick, long draperies were often used in these large windows to keep out the heat. People would “draw the drapes” to help keep a room cool without sacrificing light.
- *Porches* – Wraparound porches offered shade from the direct sun while still allowing light to pour through windows. Screened and furnished sleeping porches were also very common. People would sleep outside to catch the cool breeze of the summer night without all the bugs. Many believed that fresh air had health benefits.
- *Reflective roofs* – Many older homes had light-colored or silver-metal roofs made of lead, tin or copper. This was a great way to reflect heat away from the home to reduce interior temperatures. It's quite a contrast to today's dark asphalt shingles that can absorb a lot of the sun's rays.
- *Thick walls* – If you could afford them, thick brick masonry or stone walls were a great insulator and kept homes cool before AC. Walls 12 to 24 inches thick were common in the Deep South, blocking the heat from the inside as the day wore on, and providing some warmth as the evening chill set in.
- *Shade trees* – I would add shade trees to Mary's list. Even today, properties with mature, established treescapes provide effective shading and increase property values. I can certainly attest to how they keep me cool!

The good news is the modern green building movement is once again emphasizing passive solar design and optimizing residential building envelopes to reduce both heating and cooling loads. *LEED for Homes* <http://usgbc.org> and *Passivhaus* <http://passiv.de/en/> continue to reinvigorate residential design with logic and building features previous generations and other cultures have known for centuries. What began with Vitruvius' *Ten Books of Architecture* is now replete with modern materials, computer analysis and a scientific approach to insure the comfort we enjoy is as “naturally green” as possible.

### **June 2015 Green Living Segment Is your brain on jumper cables?**

I recently moved from a residence in an urban Pittsburgh neighborhood to a small cabin in the woods of a day camp about twenty miles north of the city. The move is a part of easing into semi-retirement and a deliberate act to downsize my ecological footprint and simplify my life as much as possible. In the month it has taken to clean, renovated, and paint the cabin, one thing is blissfully obvious; the location is wonderfully quiet. As I write this, the most dominant sound is songbirds celebrating the morning, and the crackle of wild turkeys.

I have experienced this phenomenon before. Once, while working in the Lac Burea region Rwanda, I found myself going to sleep in a tent of netting, trying to identify sounds I had never heard before. One was a very light breeze blowing through the grass. The variations made the sound almost melodic; the Earth was singing. Another was the almost imperceptible sound of men night fishing far out on the lake. The sound was fabric netting being dragged over the gunnels of their wooden canoes. I learned the next day they were almost a mile away. All of this was happening in the pitch black of night, devoid of any artificial light sources. At eight thousand feet the crystal clear night sky was stunning. I have not seen or “not heard” anything like it before or since.

Around the same time I co-purchased the home I just moved from. It is a large, brick Victorian residence on a corner lot in a dense urban neighborhood. It is close to two major hospitals in the midst of urban renewal zones. The corner is a popular bus stop;

very convenient, but replete with traffic noise, including ambulances, police cars and motorcycles. When we purchased the home we completely insulated the walls and roof, and replaced all the doors and windows with high performance, energy efficient units, including insulated glass panels to protect the stained glass. The first thing that I noticed, even before reduced energy bills, was how quiet the home had become. Not Rwanda quiet, but as long as the windows were closed it was almost like not being in the city.

My familiarity with sound stems from my love of music, playing acoustic guitar, and the fact I taught acoustics while a professor at Penn State Fayette campus. The art and science of acoustics is fascinating, and more important than most of us realize to our health and well-being. The mechanics of how we perceive sound as a species is the same for each of us, but how we evaluate what we hear is very subjective. Noise is defined as unwanted sound. A sound might be unwanted because it is loud, distracting or annoying. Noise can't be measured directly, since there is no instrument for objectively detecting how "unwanted" something is. Even if we enjoy first row, center seats at a rock concert, it doesn't mean being twenty feet away from a large stack of amplifiers is good for us. What *can* be measured is the sound level, a quantification of sound's pressure or intensity related to its loudness. Sound level is measured in decibels (dB), by a device called a sound level meter.

Generally, the threshold of hearing for a healthy person is just above zero dB. To learn more about decibels, see [What is a decibel?](#) Immediate and irreversible nerve damage can be caused by individual sound events of 140 dB or higher (120 dB in young children). Examples include gunshots, firecrackers and aircraft taking off. Any sound above 85 dB can cause [wear and tear on your ears](#) that reduces your hearing acuity over time. Proximity to the sound and duration of exposure are both important. Being close to a noise source that would ordinarily not be harmful can be, especially if the exposure is prolonged. However, hearing damage can also occur at lower sound levels, and can accumulate and worsen over time.



*Can't think? Can't sleep? Try silence.*

For reference, a whisper is 30 dB, conversational speech is 60 dB, and someone shouting at you from an arm's length away is 85dB. Noise levels of home appliances range from a 50 dB refrigerator to a 95 dB food processor. Lawn equipment and power tools have noise levels of 80-120 dB. Diesel trucks and buses, lawn mowers, leaf blowers, sirens, construction noises, sporting events, rock concerts, TVs and any common audio equipment played at excessively high levels, including the ubiquitous smart phone with ear buds and stereos, can all be harmful over short periods of time. This includes hearing loss and tinnitus, or ringing in the ears, as well as cardiovascular and hormonal disturbances. Indirect effects include [sleep loss](#), interference with concentration and learning, mood changes and aggression, and social isolation. When I lived in the city I did not need an alarm clock as I was usually waken by ambient noise at 6:30 or 7AM. Now that I am living in the woods and sleeping in an almost perfectly quiet, dark environment, I sleep naturally until 9AM or later if I don't set an alarm.

The [World Health Organization \(WHO\)](#) cites seven categories for the ways noise adversely affects human health:

1. [Noise-induced hearing impairment](#)
2. Interference with speech communication
3. [Sleep disturbances](#)
4. Cardiovascular and physiological effects
5. Mental health effects
6. Effects on performance of tasks
7. Annoyance and effects on behavior

Read more: [How noise affects you](#)

Because the ear canal of a young child is smaller than an adult's, sound pressure is up to 20 dB greater than that in an adult ear. In addition to the threat to a child's hearing, noise causes physiological and mental stress, and significantly impacts learning and cognitive development. Background noise also interferes with speech perception and language acquisition, both critical to child development and learning, especially in school environments.

Being aware of noise sources and the sometimes-subtle effect of sound, noise and acoustics on our general well-being is an important element of living green. Some things you can do include:

- Mow your lawn at times that are reasonable for your neighborhood. Use electric mowers rather than gas powered.
- Avoid using high-noise yard tools, such as leaf blowers and power hedge trimmers.
- Keep your motor vehicle's muffler in good condition.
- Only honk your horn in an emergency.
- Train your dog not to bark inappropriately.
- Put your cell phone on "vibrate" mode, and excuse yourself to a private area to conduct a phone conversation.
- Turn off TVs when no one is watching. Consider wireless headphones if others prefer not to watch and listen.
- If you want to enjoy loud music, use headphones.

In addition to the obvious physical and mental benefits of limiting harmful noises, there are other more sublime benefits to embracing silence.

Matthew Kelly recommends an hour a day for silence. From his *The Rhythm of Life*:

*"Everything great in history has arisen from silence... even great noise. Beethoven and Mozart closed themselves off from the world and inhabited silent rooms for days at a time in order to hear things that no one else could hear – sounds so glorious that they themselves would never hear in the midst of the world, and yet sounds that the world would never know if Beethoven and Mozart had not befriended silence.*

*So, befriend silence. I am not suggesting that you spend four, five, six hours a day in silence. Take some simple steps. Drop by a place of worship during the day when it is empty and quiet. Find a quiet corner and a comfortable chair at home. Leave the radio off in the car on the way to work. Have a television-free evening once a week."*

Stephen King, who has sold over 350 million books, says when he first started his career and was teaching, at the end of the week he felt like he had jumper cables attached to his brain. That's what we're doing to ourselves when we constantly have the TV on at home in every room, the radio on in the car and the iPod cranking during every workout. Constantly blowing our brains up with stimulation and information, much of which is often depressing in its own right, is simply not healthy.

Let's remove the jumper cables from our brains and connect to something bigger than ourselves. Silence is truly golden. And, it is very, very green.

### **April 2015 Green Living Segment Plastic-Free Living**

There is a famous scene in the movie *The Graduate* where Mr. Robinson counsels young Ben Braddock about the one thing he doesn't want to talk about – what to do with his life. His advice to the young graduate is a simple one-word directive. "*Plastics!*"

Mr. Robinson was prophetic in the worst possible way. Since the movie was released in 1967 the world has seen a continuous expansion in the use of plastics in all phases of our lives. This has profound implications for our existence and the state of the Earth as, a) all plastics until recently are derived from petrochemicals, b) they are used to make a myriad of products we have come accustomed to and rely on, and c) most are not biodegradable and therefore last long after they are discarded. While it is true many plastics are recyclable, we generally are not doing a good job of routing plastics to places where they can be remanufactured or repurposed. The growing slug of plastics found in our oceans now evidences the extent to which these potentially harmful materials can linger and the damage they can cause on a global scale. The masses of plastics circulating in the oceans are now identified as significant enough to alter the natural evolution of both land based and aquatic life forms while threatening the very existence of others.

The Great Pacific Garbage Patch, also known as the Pacific Trash Vortex or gyre, located in the central North Pacific Ocean, is larger than the state of Texas. There are also garbage patches in the Indian and Atlantic Ocean. The patches are defined as containing a higher amount of plastic as compared to surrounding oceans, a sad reference for comparison. To date, five patches in total have been discovered. Plastics are transported to, and converge in, the ocean where currents meet, resulting in huge islands of plastic trash. The SES (Sea Education Society) scientists studied plastics in the Atlantic and calculated there are 580,000 pieces of plastic per square kilometer. <http://bit.ly/1wkBZkd>



Size and location of mostly plastic “rubbish patches”



Dead sea bird full of plastics

According to UN Environment Programme Executive Director Achim Steiner, “*Marine debris – trash in our oceans – is a symptom of our throw-away society and our approach to how we use our natural resources.*” As a consequence of our behavior we risk losing many species in the ocean as well as negatively affecting ourselves. The average person produces half a pound of plastic waste every day, and much of it ends up in the oceans. There is little information on governmental websites about plastic pollution in the oceans, although environmental groups have sounded the alarm. There is even commercial interest in “harvesting” plastic from the oceans, a development that can’t happen soon enough. Some treaties have been formed to minimize the amount of trash entering the oceans, but enforcement is dubious at best, and they are not enough; [US Environmental Protection Agency](#). Grassroots organizations and individual efforts are vitally important if we are to protect the oceans, and in so doing, our own existence.

Plastics have come to dominate our lives because they have qualities and attributes perfectly suited for a number of applications we enjoy or rely on. They can be extremely hard or soft, rigid or flexible, non-conducting, lightweight, non-permeable, and they don’t dissolve. Clearly, there are products made of plastics for disposal of bio-medical contaminants, tubing for dispensing fluids, surgical gloves, and countless other products for which a suitable alternative would be hard to find. Likewise, the building industry relies on plastic for shielding electric wiring, toilet seats, plastic pipe, etc. In each case the use of plastic makes sense, and many are manufactured from recycled materials.

But what about all of the plastic we use simply as a matter of first cost convenience or habit? Part of the problem is we don’t recognize how this issue starts with us. We must be willing to accept responsibility and do what we can to minimize our use of plastics. It starts with being aware of how to eliminate the plastic products we can live without, or for which we have a number of good, non-plastic, more environmentally benign alternatives. For instance, think of how many plastic bags we use, and consider this: <http://bit.ly/1Nho1ub>

- *Do you really need a bag?*  
Before you accept a plastic bag at the store, ask yourself if you even need it. If you are just running in for a few things, toss them into your purse, or just carry them. I have learned to do this with little inconvenience. Ironically, too many items I purchases are packaged in plastic.
- *Keep a foldable tote in your purse or car.*  
Foldable totes are common, make great gifts, and eliminate the need for plastic bags. They come in different sizes, some with handles that enable one to sling the bag over your shoulder for more comfortable carrying that frees up your hands.
- *It’s often simply a matter of getting in the habit.*  
[Research shows](#) that it takes 18 to 254 days to form a habit, so give yourself some time to make new ones. Lead by example and help those around your to do the same.

Now, ask yourself the following:

- Do you need to be drinking (plastic) bottled water?
- Could you use a reusable travel cup for beverages?
- Are you recycling as much plastic as you can?
- Do you use a plastic Christmas tree or decorate a live one?

Anyone interested in kicking the plastic habit should read “*Plastic Free – How I Kicked the Plastic Habit and How You Can Too*” by Beth Terry. <http://bit.ly/1HUS6w0> The book is available online for downloading, and the link provides instructions for how signed copies can be ordered to benefit environmental groups. Order one for you and for some of your friends. The Oceans will thank you for it.

## March 2015 Green Living Segment Zero Waste Living

Growing up, I thought we did a pretty good job of minimizing waste. As one of nine children in a blue-collar family of modest means, we were well aware of our parent's efforts to be as frugal as possible. Their requests to help out were always reinforced with gentle reminders of why it was important. In previous Green Living segments, I've written about how much of what we ate came from our garden, and Mom canned more things than I could count. Organic waste went back on the garden throughout the year, along with grass clippings and the autumn leaf "harvest". Clothes, school supplies, and toys were shared and handed down when the time came and my siblings cycled through them. Cottage cheese containers were reused to refrigerate leftovers, and some food we didn't consume went to our two beagles. Gift-wrapping was often the colorful comic section of newspapers, and holiday and birthday cards were reused; something we still laugh about. We always had what we needed, but the "waste not, want not" mantra was always in play.

Yet, there was always stuff that went into the garbage can or burn barrel. Back then I didn't think about how much more we could reduce what went to the landfill. I didn't even know where the landfill was, who owned it, or how our waste got there. Today, there is a much better awareness of the consequences of wasting resources, and how best not to. My thanks this month to our friends at *One Green Planet*, who have a great article on how to live a zero waste lifestyle – or, at least – come close. <http://bit.ly/1bCU3jd>

Americans make up about five percent of the world's population, yet we generate about [30 percent](#) of the world's garbage. We average one million pounds of materials per person a year, enough garbage to fill [63,000](#) garbage trucks every day. It's delivered to over [1,908](#) landfills, many of which are far away from where the trash is generated. All of them will eventually be filled, necessitating the need for more. Trash that is not gathered and delivered to where it is supposed to go often ends up polluting the environment, including our water ways and oceans. Every major ocean has a [trash island](#), comprised largely of non-biodegradable material flushed into the oceans from land.

Living a zero waste life style starts with being aware of what we use and why. Disposable water bottles, coffee cups, napkins, packaging and myriad of other things we waste are a product of our disposable society and culture and mind set. Living a zero waste lifestyle involves some forethought, commitment and a lot of inspiration. Bea Johnson, the famed [Zero Waste Home](#) blogger and zero waste guru has outlined simple steps everyone can adopt to limit their trash legacy. If everyone in America adopted only a few of these habits, we could keep thousands of tons of trash out of landfills, [improve air and water quality](#), and save some money in the process.

Opportunities to reduce the waste going to landfills can be categorized following [Bea Johnson's](#) recommendations. They are listed here with links to other ideas and resources.

### **Kitchen**

*Don't use disposables* – The kitchen is filled with disposable items that are responsible for a lot of waste, and we have come to rely on their convenience. Try these alternatives instead:

- Replace paper towels with [reusable ones](#)
- Pack to-go meals with [reusable sandwich bags](#)
- Non-disposable or biodegradable [dinnerware](#)
- Always bring your own shopping bags
- Earth friendly [sponges](#)

*Buy in bulk* – Disposable containers generate [13 million tons](#) of plastic waste in the U.S. Taking a few minutes of planning before you head to the grocery store can help to eliminate that waste.

- Bring mason jars or reusable plastic containers with lids to the grocery store to hold bulk items or food from the deli counter. Check out this [expert guide](#) to zero waste shopping from *Trash is for Tossers*.
- Consider buying [bulk castile soap](#) to use as hand and dish cleaner instead of buying a bunch of little bottles of different cleaners. Castile soap has many different uses, for example, it can be used as body wash, shampoo, and tub scrub.

*Don't waste leftovers* – Forty percent of all food goes to waste in the U.S. Check out these recipes from [WeHateToWaste.com](#) and learn to love your leftovers. Whatever can't be salvaged should be composted, or, in the best case safely shared with others who do not have enough.

### **Closet**

*Shop Second Hand* – Carbon Trust estimates that CO2 emissions associated with clothing account for [three percent](#) of global emissions. This number includes out-sourced production, shipping, washing, and drying. Shopping secondhand saves good clothing from a landfill and reduces the overall demand for resource intensive clothing produced off shore under what may be dubious working conditions. I have recently taken lots of clothes to Goodwill where I was pleasantly surprised to see the quality of clothing for sale, and how well the staff prepared and presented them.

*Take care of clothes* – Buying fewer items of higher quality will save you money in the long run. It is usually much less expensive to [mend](#) rips and tears or have clothing repaired or altered by a tailor than discarding it.

#### **Office**

*Bring your lunch* – According to [RecycleWorks.org](#) disposable lunches using to-go packaging, and plastic utensils generate about 100 pounds of trash per person annually. ReUselt.com recommends these [waste free lunch supplies](#).

*Go digital* – The average office worker uses two pounds of paper per day. While the paperless society anticipated by early advocates of computers has not materialized, you can take notes on your laptop and communicate with your colleague's via e-mail rather than using paper. Notepads are one of the easiest things to make using all kinds of recycled paper.

*Recycle* – Unless your home or office has gone completely paper-less, chances are there are stacks of paper that could be recycled. Reusable water bottles are always the best option, and any plastic water bottles should be recycled. Introduce a recycling bin to your office. You can even make a game out of it, replete with friendly wagers, to get people involved. See [Recyclebank](#).

#### **Bathroom**

*Simplify cleaning supplies* – White Vinegar and baking soda are your [best friends](#) when it comes to common cleaning needs. These all-natural alternatives to dangerous chemical cleaners are versatile, effective, and come in containers that can be recycled. Use this link for a list of [zero waste alternatives](#) bathroom supplies.

*Make your own cosmetics* – Save money, avoid harsh chemicals, plastic containers, and packaging by making your own cosmetics. [Free People's blog](#) has instructions for making your own natural cheek and lip stains, perfume, shampoo, make-up remover, and more. People with chemical sensitivities or allergic reactions to commercial beauty products can use many of these homeopathic alternatives.

Other opportunities to approach zero waste lifestyle will depend on how and where you live, the support services you have nearby, and your willingness to be creative. Many farmer's markets and grocery stores support bulk purchasing, reusable totes and the convenient return of plastic bags. I also recommend bringing the subject up at your places of worship or your children's school, as they represent a viable end user for many things we might otherwise dispose of. For more information on adopting a zero waste lifestyle, check out these helpful resources:

- [Zero Waste Home](#)
- [The Story of Stuff](#)
- [42 Ways Not to Make Trash](#) via No Impact Man
- [Trash is for Tossers](#)
- [Why You Should Try Zero Waste Living](#) via Utne

Green Edge Supply shares your interest in living green. Feel free to contact us as [www.greenedgesupply.com](#) with any comments on this article, or other green living suggestions you have.

### **February 2015 Green Living Segment**

Lately, I have been thinking a lot about retirement funds, social security benefits, TIA-CREF accounts and how blessed I am to have a little put away for when I decide not to work full time anymore. That is something that will happen much sooner than later, and I am looking forward to it. As I approach retirement age everything from Medicare and Medicaid to where I'd like to live and what I want to do with what's left of my time and energy loom large. I've never fancied myself an investment genius, and have been willing to let others much more skilled than I guide my modest assets. Several years ago I was struck by how Bernie Madoff devastated the financial security of thousands by operating an investment Ponzi scheme that him and a few associates billions. More recently I am reminded of how fluctuating oil prices can rock global economies, effecting everything from Russia's ability to maintain its occupation of neighboring Crimea and the Ukraine, to how terrorist groups fund their very existence, to nightly stories about the economic viability of exploring for carbon fuels in the US. The latter brings back memories of the first OPEC oil crises in the early 70s and how we are still bound up in geopolitics and wars in part because of our reliance on foreign oil. Yet "Big Oil" remains the bedrock of many retirement and investment portfolios.

I have always been interested in environmental influences that impact socio-economic trends, but I did not foresee how important the global green economy would become. And, while global market forces seem overwhelming and out of our personal control, there are a few colloquialisms that apply; we vote with our feet and money talks. Our actions speak louder than words, and the decisions we make about spending our personal time, energy and resources can be a powerful influence for good. Hence, the importance of green investing as a function of green living.

Investing can take on many forms, and need not be characterized by grand gestures or large sums of money. Spending money at a particular enterprise is akin to investing in their stock, though the nature of the investment and return may be quite different. Typically we want our time, energy and the resources we expend to be aligned with our personal values and philosophies. If our goal is to live green, these frequently reflect our views on environmental stewardship and what we expect from those who govern. Green investments recognize that business practices affect the environment, consumers, workers at all levels, our communities and societies at large. Our individual priorities, investment goals and means by which we pursue them may vary widely, but they generally fall into three categories:

1. *Commitment to serving our community and society in general.*

In many ways this category is the most attainable, visible and immediate. When we invest our time, skills and energy in working with local organizations committed to the common good our involvement is often as valuable as or more valuable than a monetary donation. Any organization that has environmental stewardship or social equity as part of its mission is a possible candidate. Local efforts include getting involved in any number of school related needs, community gardens, tree planting and trail maintenance, food banks, meals on wheels and a number of others. Most communities have a Goodwill center, Salvation Army depot, United Way, Red Cross, or emergency responder organization, all of which can use our help. In addition to cash donations, any time spent volunteering that offsets an expense is an investment in an organization's ability to perform their services.

2. *Ethical management practices and high labor standards for employees and those in a supply chain.*

Labor standards and the human factors concerns associated with supply chains range from small, local business that may employ a few undocumented workers, to international scandals involving foreign governments, trade agreement violations and organizations who knowingly support human trafficking. In contrast, many companies want to be seen as champions of fair labor practice and environmental stewardship, buying locally and investing in the community. Buying their products or investing in them supports their cause.

One example is Vivendi, a French media and telecommunications giant recognized as one of the greenest companies in the world. It has made significant efforts to lower carbon emissions and to be environmentally responsible throughout all of its subsidiaries. Maroc Telecom, Vivendi's telecommunications subsidiary in Brazil, requires its suppliers to adhere to the sustainability and corporate responsibility principles of the United Nations Global Compact. Vivendi was also one of the first companies, to tie its executives' annual pay to the environmental and social performance of the company.

A better-known example in the global green building movement is the Forest Stewardship Council. FSC Certification is based on verifying a number of the environmental and social equity criteria. Their supply chain custody compact insures the wood based products it certifies are ecologically sound and socially correct. FSC is the default organization referenced by the US Green Building Council in its LEED rating system. By purchasing FSC certified products or investing in companies that participate in the FSC certification process, the consumer is supporting the tenets of sustainability in that segment of the green building industry.

Another is Interface Global, a US based, internationally known carpet products supplier. Founder and Chairman, Ray Anderson, set a new standard for environmental stewardship in 1994 when he launched his effort to become a world leader in sustainability in manufacturing and human relations. Based on Bill McDonough's Cradle-to-Cradle philosophy, the story of Interface is legendary in green building circles. It has inspired a revolution in other green building industries worthy of investment.

Starbucks and Whole Foods also strive to maintain high environmental standards and good employee relations. Recently, Starbucks agreed to pay for college tuition to over 40 programs at Arizona State University for all benefits-eligible partners based in the U.S. To be eligible they must work in support centers, plants or at any company-operated enterprise including Teavana, La Boulange, Evolution Fresh and Seattle's Best Coffee stores, and not yet have a bachelor's degree. Participants will have no commitment to remain at Starbucks past graduation.

3. *Dedication to producing quality products that are safe.*

In this instance, "safe" means anything that uses human and natural ecology as design and manufacturing determinants, and which do not degrade the environment. Like ethical management practices, these gestures can be small and personal, or manifest themselves international scale. "Quality products" are typically those that are non-toxic, durable, locally manufactured, easily recycled or otherwise kept in use. In the best case they evaluate the human spirit, support the arts and local artists and otherwise transcend simple, temporary utility. They do not contain volatile organic compounds or products derived from endangered species, endocrine blockers, carcinogens or other components that are unsafe to ingest, breathe or touch. Simple examples include buying food from community supported organic agriculture outlets, and eliminating anything that is genetically modified. Related products include those used for green cleaning and personal hygiene, which are environmentally benign. Others are dedicated to child safety and wholesome play activities, which do not condone violent behavior or support human conflict.

The art and science of personal investing in purely financial terms is best done with the help of an investment counselor unless you are well versed in the tools and strategies necessary to invest successfully. An internet search using keywords such as

green investing, green businesses, return on green investments or green companies will serve to get you started. The exercise usually starts with a self-assessment of ones' current holdings to determine which are green and which may benefit from additional consideration. Green investments are subject to market forces and volatility in the same way non-green investments are, and therefore need the same care and attention to detail. The same qualities and attributes inherent in traditional stock and bonds apply to green investment products, and each is subject to the same laws, tax consideration, ownership and transfer considerations.

Green investments do not guarantee superior returns on investment, but there is no reason to believe a financial sacrifice is required to participate in green business opportunities. Many green companies are doing quite well and are projected to continue that way. It is said "the bottom line of green is black". To the extent that is true, green investments can contribute to a green life well lived.

### January 2015 Green Living Segment

For many, January is a time for reflecting on the past and looking to the future. The New Year brings opportunity for casting off what we want to change or leave behind and embracing what we can to make life better for ourselves and those we care about. Year-end TV and radio broadcasts feature those who have gone before, reminding us we are all just passing through. This very human reality is often what spurs us to take stock of our lives, and underscores the sense of urgency some have to resolve to be better and do better.

Yet, I've never been one for New Year's resolutions. Not because I believe I can't improve or be a better person. To the contrary, I have a long way to go in those departments. I believe it's because I was raised to deal with things as they arise and not procrastinate. My nature, which was reinforced by my architectural education and practice, is to always look for ways to improve and solve problems in the most timely and efficient way possible as the need arises. That has always superseded the traditions or customs associated with making New Year's resolutions. Yet, while I prefer to pursue a path of self-improvement independent of official holiday resolutions, and how they might influence our desire to live green.

According to [Statistic Brain](#) and [USA.gov](#) the most popular New Year's resolutions are:

#### *Statistic Brain*

1. Lose weight
2. Get organized
3. Spend less, save more
4. Enjoy life to the fullest
5. Stay fit and healthy
6. Learn something exciting
7. Quit smoking
8. Help others with their dreams
9. Fall in love
10. Spend more time with family

#### *USA.gov*

1. Lose weight
2. Volunteer to help others
3. Quit smoking
4. Get a better job
5. Save money
6. Get fit
7. Eat healthy food
8. Manage stress
9. Manage debt
10. Take a trip
11. Reduce, reuse, recycle
12. Drink less alcohol

Not surprisingly, the most common New Year's resolutions have to do with personal improvements – lose weight, quit smoking, get fit, eat healthy, etc. This is in keeping with Statistic Brain's assessment that 47% of our resolutions are about self-improvement or education, 38% are about weight loss and 34% are about money issues. I find this an interesting statement on our culture, lifestyles, our health care system and a myriad of other social constructs that have to do with how we prioritize spending our time and resources. A few are about reaching out to others – help others with their dreams, volunteer to help others, and spend more time with our families. Some are related in subtle, yet very important – manage stress, manage debt, and drink less alcohol. Only one is overtly environmental – reduce, reuse and recycle. Save the planet (or even the oceans), contribute to a green economy, buy locally, invest in community agriculture, support an environmental advocacy group, drive our cars less, ride a bike more, etc., did not make either list, yet I know these things are important to many of my friends and colleagues. But before we go too far, let's see how the majority of us do, despite what I'm sure are our best intentions. According to *Statistic Brain*:

- 45% of Americans usually make New Year's resolutions
- 17% make New Year's resolutions infrequently
- 38% never make New Year's resolutions
- 8% of people who make New Year's resolutions succeed in reaching their goals
- 24% consistently fail or never achieve their resolution goals

- 49% have infrequent or partial success

People who explicitly make resolutions are ten times more likely to achieve them, and the indicators of that come quickly;

- 75% only persist for a week
- 71% stay on track past two weeks
- 64% past one month, and 46% past six months or more
- 39% of people in their twenties achieve their goals each year
- 14% of people over fifty achieve their goals each year

If we are going to be among the 8% that accomplish our goals we need to know how best to achieve them. In a January 2012 contribution to *Forbes* magazine, Dan Diamond gives us these [suggestions for success](#).

- *Keep it simple.* A number of simple goals may be more attainable and better in the aggregate than a large, all-consuming aspiration that is not accomplished
- *Make it tangible.* Something that is understandable and measurable is better than an abstraction that can't be defined. Keep it real.
- *Make it obvious.* Don't be shy or reticent to share your goals for fear of failure. Feel free to involve others and let them contribute to your success.
- *Keep believing you can do it.* If at first you don't succeed, try, try again. Be open to approaches you may not have thought of. There are usually more ways than one to succeed.

I believe all of this is good advice, applicable to whatever resolutions or goals we set. So, if living green or *greener* is what you would like to do, choose something simple and attainable, gather the help you need to succeed, and stick with it as best you can. Every effort to drive less and ride a bike more, recycle, volunteer to plant trees, compost, garden, or buy locally starts with the desire to do it, and that is very personal. But, all of these things can be more fun and, perhaps, more easily attainable if we do them with others.

And me? Well, I'm going to continue with two initiatives I started last year. Months ago, I decided to get back on a bike, and I have been riding consistently. When I bought the bike I solicited the help of a good friend who is very knowledgeable about bicycles and an avid cyclist. To Dan Diamond's point, I'm sure having a riding partner is helping me achieve my goal of getting in better shape. It sure makes riding more fun – and safer. Cold weather rides are short, but a good reason to get out of the house, beat the winter blues, and get ready for spring.

Also, last fall I decided to record my second CD, which I have been practicing for. I will be back in the studio this month, something I very much look forward to. My music is only a hobby, but I find it peaceful, introspective, and good for my soul. My goal, or resolution, to ride and play music is take better care of my body and nourish my spirit; to work on making myself more green, for my benefit, and for those around me.

Good luck with any resolutions or goals you set for yourself this year. Here's wishing all of you a very Happy New Year, and a healthy and prosperous 2015. May it be the very best, greenest year ever.