

**MAY TIP SAVINGS: Up to \$1,000/YR + rebates**  
**Avoided Emissions of CO<sub>2</sub>: Up to 4,000 lbs./YR**



## **\$USTAINABILITY \$AVINGS TIP**

### **FROM DREAM HOME TO GREEN HOME**

*A revolutionary building philosophy for the future*

It's May and temperatures are about to reach triple digits... it may be a good idea to sit down when you open your next utility bill. Why are we in this predicament? As it turns out, the conventionally built home really isn't such a dream. We've learned that spacious suburban homes may look beautiful on the surface, but closer scrutiny reveals that they may be impractical. Today's homes generate hefty energy bills through inefficient design, construction and insulation. They may impact our health with dangerous volatile organic compounds (VOC's) from furnishings, paints and carpets, or are situated so that the summer sun makes them feel more like a hothouse for plants.

Not too long ago, we built much more sustainably. Think about building a home here in the Southwest out of adobe blocks. The blocks were made with the soil right onsite. The excavated soil created a cool basement for extra room or storage for food. Homes were oriented to shade doors and windows, and trees were planted to provide cooling shade.

***Buildings account for 68% of  
our electricity consumption  
and 38% of our CO<sub>2</sub> emissions.***

***-U.S. Department of Energy***

Then, inexpensive fuel and energy changed all that. Walls were built from wood harvested a thousand miles away, marble tiles were imported from Italy, homes were placed with no consideration of the site and exposure - only for how many houses could fit in the development. Shade trees were replaced with vast expanses of water-thirsty lawns. Now YOU are the one that gets to open your utility bill and pay the price.

Does all this have you ready to join the *Green Home Revolution*? Don't worry; we aren't going to suggest some futuristic geodesic dome - green has gone mainstream! Simply put, 'green homes' are designed to be environmentally responsible while considering your well-being. Sometimes it may cost a little more up front, but it pays you back with lower energy bills, higher home value, and long term paybacks for your health and the health of the planet. Use our easy principles when thinking of any building or remodeling projects for your home - it's time to change how we think.

### **GREEN PRINCIPLES TO FOLLOW**

#### **1. Resource Conservation**

- Build with durability in mind and long-term use.
- Look for recycled, local or regionally produced building materials.
- Reuse or recycle construction waste and if remodeling, donate usable items to non-profits.
- Minimize urban sprawl and retain key environmental assets.

#### **2. Indoor Environmental Quality**

- Provide a healthy and comfortable indoor environment.
- Incorporate day lighting and good ventilation.
- Select building products, finishes and furnishings carefully to reduce or eliminate VOC's.
- Configure your ventilation to introduce fresh air when running. Ask your HVAC contractor.

*Learn to live Green*

More on page 2 

### 3. Water Conservation

- Incorporate EPA's WaterSense labeled toilets, showerheads and faucets.
- When buying a clothes washer or dishwasher, check the Consortium for Energy Efficiency Web site ([www.cee1.org](http://www.cee1.org)) to compare water use between models.
- Use Xeriscape principles for your landscape including low-water using plants and efficient drip irrigation to reduce outdoor use.
- Don't forget to consider gray water or rainwater harvesting systems for landscape irrigation as well and permeable pavement for surfaces.

### 4. Livable Communities

- Connect with community through front porches and community open space or natural areas.
- Create a home for long-term living regardless of age.
- Consider affordability and access to community services.

### 5. Energy Efficiency

- Incorporate effective insulation, high performance windows, tight construction and ducts, efficient heating and cooling equipment and EPA's ENERGY STAR lighting, appliances and electronics.
- Install or change out to fluorescent or LED lighting.
- Consider site orientation and landscape shading (passive-solar principles).
- Once you have an efficient home, consider renewable energy such as solar hot water or solar electric systems.

### CHECKLIST FOR SAVINGS

- To learn more**, attend our *Living Green Workshop Series, Green Remodeling: The Greenest Building is the Existing One, with Philip Beere on Saturday, May 14 at 1:30 p.m.* Visit [www.mesaaz.gov/sustainability](http://www.mesaaz.gov/sustainability) or call (480) 644-4400.
- Online resources can help in the process.** Find our favorite sites in the text box on the right, and visit our Web site for live links for easier Web surfing at [www.mesaaz.gov/sustainability](http://www.mesaaz.gov/sustainability).
- Books on green building and remodeling, energy efficiency, solar and more** can be found at the City of Mesa libraries, visit [www.mesalibrary.org/research/living-green.aspx](http://www.mesalibrary.org/research/living-green.aspx).

### START SAVING

Start saving by incorporating green principles into your home to do your part for *building a sustainable community*. Visit our Web site for more sustainability savings tips at [www.mesaaz.gov/sustainability](http://www.mesaaz.gov/sustainability).

*Learn to live Green*

**More information about green building, solar, rebates, incentives, and how to find the right contractor** can be found online. Visit our Web site to find these live links.

**[www.mesaaz.gov/sustainability](http://www.mesaaz.gov/sustainability)**

**Energy Star:** [www.energystar.gov](http://www.energystar.gov) - common home problems, home energy audits and an online ENERGY STAR home advisor.

**City of Scottsdale Green Building Program:** [www.scottsdaleaz.gov/greenbuilding](http://www.scottsdaleaz.gov/greenbuilding) - green home guide, green home buyers guide, green workbooks on remodeling and landscape revitalization.

**Arizona Solar Energy Industries Association (AriSEIA):** [www.arizonasolarindustry.org](http://www.arizonasolarindustry.org) - learn about Arizona specific consumer information.

**Arizona Solar Center:** [www.AzSolarCenter.org](http://www.AzSolarCenter.org) - learn about local solar news, events and training available.

**AZ Energy Guide:** [www.AzEnergyGuide.com](http://www.AzEnergyGuide.com) - helps you estimate your savings, download rebate forms, find qualified local installers and receive free quotes.

**Find Solar:** [www.findsolar.com](http://www.findsolar.com) - an online service of the American Solar Energy Society (<http://ases.org>) to help home and business owners make the transition to solar power. The site includes interactive calculators, maps and the latest solar news and developments. This site also helps you to find a trusted solar professional in your area. Best of all, they provide a free, no obligation phone consultation with a solar energy expert at 1-866-485-2757.

**Foundation for Senior Living Home Improvements:** [www.fsl.org/services/HomeEnergy/consumers.html](http://www.fsl.org/services/HomeEnergy/consumers.html) - includes home repair info and weatherization services available to eligible low-income and disabled adults.

**DSIRE (Database of State Incentives for Renewables & Efficiency):** [www.dsireusa.org](http://www.dsireusa.org) - a comprehensive source of information on state, local, utility and federal incentives and policies that promote renewable energy and energy efficiency.