Shade and $ave Recent Research Findings

Research has shown that purposefully planting trees for the primary purpose of shading can save homeowners money after 3-5 years, depending on the type and size of tree planted.

- Just three trees, properly placed around a house, can save up to 30% of energy use. *U.S. Forest Service Center for Urban Forest Research.*

- Large deciduous trees planted on the east, south and west sides of your home create soothing shade from the hot summer sun and reduce summer air conditioning costs by up to 35%.
  www.arborday.org/globalwarning/summerShade.cfm

- Although homeowners have intuitively used landscaping to save energy for many years, we are only beginning to realize the magnitude of the savings possible. Studies have shown that winter heating bills may be reduced by as much as 15 percent, while summer cooling energy needs may be cut by as much as 50 percent. Conserving Energy with Plants – Leaflet No. 631, 2010.
  www.ces.ncsu.edu/depts/hort/hil/hil-631.html

- "Current research indicates that shade trees can reduce energy costs by up to 30% over and beyond any benefits related to construction* and home-owner activities." Eric Muecke, N.C. Division of Forest Resources, Urban Forestry Specialist – Western Region; Certified Arborist
  *This would also apply to homes that were built to ENERGY STAR specifications.

- American Forests, in 2001, found that tree cover in the metro Atlanta area saved residents approximately $2.8 million annually in reduced energy costs.
  www.americanforests.org/graytogreen/energy

- The net cooling effect of a young, healthy tree is equivalent to ten room-size air conditioners operating 20 hours a day. U.S. Department of Agriculture,
  www.coolcommunities.org/urban_shade_trees.htm

- The Cool Communities Shade Tree (CCST) Program greatly exceeded its goal of planting 14,000 trees during the 3 years ending Dec., 2008. The Program's legacy will be a long-lasting group of measurable benefits for out region's economy and environment. The program provided 17,398 shade trees since 2006, which resulted in an electric demand reduction of 2,957.66 kW and a total energy savings of 2,714,088 kWH per year on average over the next 20 years.
  www.coolcommunities.org/urban_shade_trees.htm