CASE STUDY:

THE AMERICAN GREEN HOME

Rebate programs around the nation are making it easier to perform cost effective green retrofits. This home is an exemplary model for American investors and homeowners, which is why it is called “The American Green Home”.

“It is a clear and exciting example of what any home-seller or home-buyer may be able to do, in order to take any home in America that they like, and turn that home into a cost effective green home which would lower the overall cost of homeownership and increase the overall value of their investment. “

—JOHN SHIPMAN, *GreenPoint Rater*

The investor who purchased the home calculated that he could make cost effective retrofits and upgrades by taking advantage of the Energy Upgrade California in Los Angeles County rebate program and other incentives. These retrofits would lower the overall cost of homeownership and increase the home’s overall value while creating a healthier home that saves more energy, water, and other natural resources. It is the first home in Walnut, California to earn the coveted GreenPoint Rated Existing Home Elements label.

ENERGY USE

A comprehensive energy audit was the first step made to help determine which energy upgrades and retrofits would be appropriate. An HVAC System designed to ACCA and HERS efficiency and comfort standards was installed in the home, as well as a tankless water heater to increase hot water efficiency. Energy conservation measures were taken to minimize energy loss including: insulating the attic; attic and whole house air sealing; installing air sealing slab with vapor barrier and air sealing top plates; and upgrading to dual pane high efficiency low-e windows. Incandescent light bulbs were replaced with CFL bulbs which use about 75% less energy and last 6 times longer. Lastly, ENERGY STAR Bath Fans were installed which have a longer life, and use 70% less energy than standard models.

PROJECT STATS

LOCATION: **Walnut, CA**

GREENPOINT RATED SCORE: **49**

YEAR BUILT: **1975**

SIZE: **1,443 square feet**

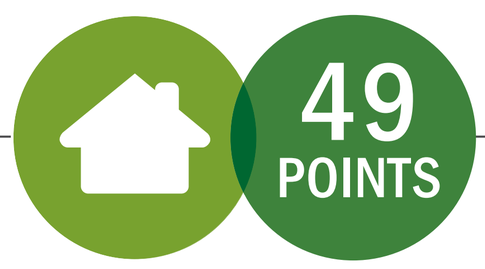
PROJECT SCOPE:

- **Improve indoor air quality**
- **Improve Comfort**
- **Improve water and energy efficiency to lower homeowner costs**
- **Add value to home through the green labeling process**
- **Perform cost effective energy upgrades through EUC**

GREENPOINT RATER:

John Shipman, Charisee Dunn, Energy Efficiency Management, Inc.

ELEMENTS LABEL



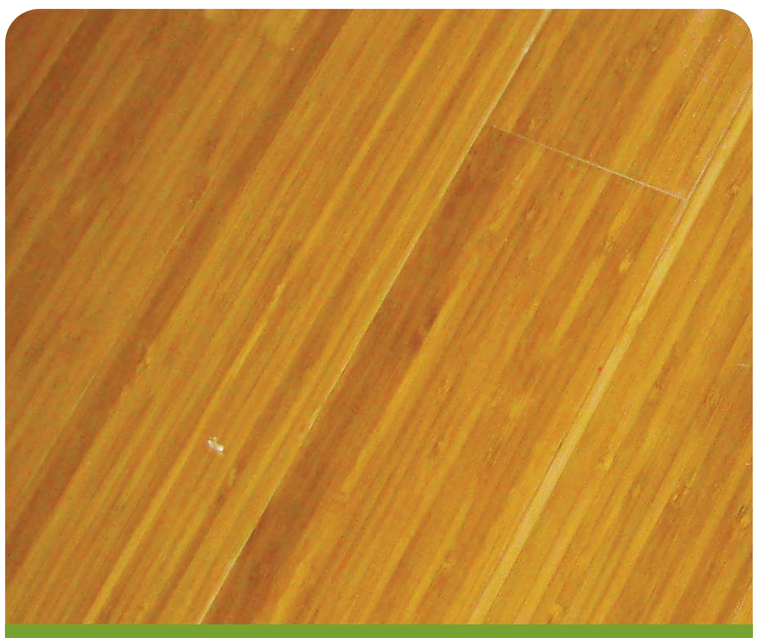
INDOOR AIR QUALITY

Whole house combustion safety testing was performed to meet Building Performance Institute standards. A carbon monoxide meter was installed to increase safety (carbon monoxide is the leading cause of poisoning deaths in the United States), and a Amana sealed combustion 96% efficient heating system was installed to limit combustion byproducts. To minimize other pollutants, formaldehyde-free GreenGuard Certified ductwork was used throughout the house, and interior paints are all zero VOC.

Carbon Monoxide Detector

RESOURCE CONSERVATION

Bamboo and cork, which both regenerate quickly, were used for flooring throughout the home. Engineered lumber was used for roof rafters, beams and studs, insulated headers, oriented strand board wall and roof sheathing. Pest Inspections were performed to check for ants, termites and other pests who can cause health problems and damage to paper or wood-based building materials.



Bamboo Floor

WATER CONSERVATION

High performance showerheads, dual flush toilets, and a ENERGY STAR dishwater were all installed which can cut water usage by as much as 40%, 60% and 20% respectively with little noticeable difference in performance (ENERGY STAR dishwashers are also 10% more energy efficient than standard models). Upgrades to the landscaping and irrigation system were implemented, including hydrozoning, installing smart controllers to more efficiently control water usage, and a rainwater catch system which catches 100 gallons per year, reducing the need to use municipal or well water for lawns and gardens.

Dual Flush Toilet

COMMUNITY & LIVING GREEN

The home received GreenPoint Rated points for being located within half a mile of a major transit stop and other neighborhood services. The home also earned points for being a compact development and home size which has a smaller footprint on the energy grid and the environment.