# THE ANATOMY OF AN ENERGY EFFICIENT HOME

**HOUSEHOLDS consume about one third of all the electricity used in Ventura County.**
**Energy Efficiency is the easiest and least expensive way to reduce energy use.**

## 1 Hot Water Heater

Hot water heating is the single greatest use of natural gas in local homes. High efficiency water heaters use 10-50% less energy than standard models. Set the temperature control to the mid-point range of 110-120°F. Insulate hot water pipes. Install low-flow shower heads and faucet aerators.

## 2 Door Leaks

Making sure doors and windows are properly sealed. By doing so, many homes can reduce the need for heating and air-conditioning as well as eliminate uncomfortable drafts.

## 3 Windows

Consider installing efficient double pane windows with "low-e" coatings. These windows keep a house warmer in the winter and cooler in the summer. Ensure all air gaps are closed with weather stripping. Use shades or drapes to regulate light and heat.

## 4 Insulation

Installing fiberglass or cellulose insulation material in accessible floor, wall or roof cavities reduces the need for heating and air-conditioning, and makes a home less susceptible to drafts.

## 5 Refrigerators and Other Appliances

Compared to older models, new ENERGY STAR® refrigerators and freezers use at least 20% less energy than conventional models. Recycle old refrigerators; working or not. Clean refrigerator coils and check the gasket seals. To help prevent electricity outages during the summer months (July through September), avoid running unnecessary appliances at "peak hours" of 10 a.m. to 6 pm. Turn off electronic devices such as battery chargers, radios, televisions/cable boxes, and electronic games that consume power even when turned off.

## 6 Meter

Many consumers have found a way to make their meter spin backwards by installing a qualified solar photovoltaic system that produces more electricity than is needed by the home during the day. The electric grid acts like a battery, storing electricity for nighttime periods when the solar system is not producing electricity.

## 7 Air-Conditioning

Air-conditioning is the most significant peak demand electricity use in California. During the summer months set thermostats for 78°F and higher when away from home for more than 4 hours. Use room and ceiling fans to reduce the need for air-conditioning. Check air-distribution ducts for leaks and obstructions. When replacing old air-conditioners, buy Energy Star® units with a Seasonal Energy Efficiency Ratio (SEER) of 14.0 or higher for greatest efficiency.

## 8 Lighting

Improve lighting efficiency with Compact Fluorescent Bulbs (CFL's) that use less than one-fourth the energy of incandescent bulbs for the same light output. Dispose of CFL's with your household hazardous waste. Use lighting controls and dimmers for comfort and efficiency.

## 9 Solar Panels

Solar energy can be used to either heat water or produce electricity in homes. Solar photovoltaics (PV) enable a homeowner to generate some or all of their daily electrical energy demand. If you have a pool or spa, solar hot water heating will save money and reduce the need for natural gas. Utility rebates and tax credits are available to reduce the costs of solar installations over the long-term.

## 10 Shade Trees

Shade trees planted on the south and west side of the home can significantly reduce solar heat gain during the summer, reducing the need for costly air-conditioning. Make sure to select deciduous trees (trees that lose their leaves in the winter), to take advantage of the natural solar heating of the winter sun.

## 11 Heating

Space heating is one of the largest consumers of natural gas in a home. Buy the most efficient heating system possible. Clean the system filter at least twice a year and close the fireplace damper when not in use. Install a programmable thermostat and set the thermostat to operate only when the home is occupied; set heaters at 65°F (or lower) when away from home and 70°F (or higher) when rooms are occupied.

***For additional energy efficiency information***
***www.vcenergy.org***

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