Chula Vista Energy Efficiency Fact Sheet

As a part of the City's Climate Action Plan the City is requiring some energy efficiency improvements in older or more inland homes but these same improvements could also help other homes reduce their energy bill and improve their homes indoor air quality. Please find general information about the average payback, potential for energy savings and other benefits below. Individual energy savings will depend on that home's energy usage. For more information, such as installation details, please visit: www.chulavistaca.gov/departments/clean/retrofit.

| Name | Description | Benefit | Average Simple Payback (years) |
|--------------------------|---|---|---|
| LED Lighting | Replace incandescent or CFL light bulbs with LED light bulbs | LED lights can use up to 75% less energy than incandescent bulbs and up to 15% more efficient than average Compact Florescent Light (CFL) bulbs. They also reduce cooling costs because they put off less heat than incandescent bulbs. | 1.1 |
| Water Heating Package | <u>Water Heater Blanket</u> - Insulate exterior of storage water heaters, if needed. <u>Hot Water Pipe Insulation</u> - Insulate all accessible hot water pipes. <u>Low Flow Fixtures</u> - Upgrade sink and shower fittings to low flow showerheads and faucets. | Water heating can account for up to 50% of an average home's natural gas usage. By insulating the tank (if not already insulated) and exposed piping you can minimize the amount of heat that is lost as you get your hot water. By utilizing low flow faucets, aerators, and low flow showerheads you save water and the energy used to heat up that water. | 6.9 |
| Attic Insulation | Add attic insulation in buildings with vented attic spaces. | Attic insulation helps your home maintain a stable temperature and reduce heating or cooling costs. If combined with other attic work such as duct sealing or air sealing, you can bring down total costs. | 11.4 |
| Duct Sealing | Air seal all accessible leaky ductwork. | Leaky ducts can allow a pathway for dust or other indoor air quality concerns to enter your rooms while letting the air you paid to condition to escape before it reaches the living space. Duct leakage can be as high as 30% in average California homes. | 4.6 |

| Air Sealing | Apply air sealing practices throughout all accessible areas of the building. Homes with one or more vented combustion appliances should have a BPI Combustion Appliance Safety Inspection performed after air sealing. | Houses built over the past five years are over 20 percent tighter than those built a decade earlier. This means the air you paid to heat or cool can escape and increases your energy bills and outside pollutants can enter your home. | 7.5 |
|--------------------------------|---|---|---|
| Cool Roof | Install a cool roofing product rated by the Cool Roof Rating Council (CRRC). | Cool roofs help save energy by increasing the amount of solar energy that get reflected away from your home and minimize the need for cooling on hot days. | 9.6 |
| Windows | Replace existing single pane windows with a dual pane product. | Energy efficiency windows not only reduce heating and cooling costs they can also reduce the ability of moisture and noise to enter your home. | Not Cost- effective |
| Water Heater Replacement | High Efficiency Heat Pump Water Heater: Replace natural gas storage water heater, or, tankless water heater with Heat Pump Water Heater -or- High Efficiency Tankless Water Heater: Replace natural gas storage water heater, or, less efficient tankless water with high efficiency tankless water heater. | About 18% of average homes energy is used for heating water. Heat Pump Water heaters are on average 200% to 300% more efficient than traditional water heaters while tankless units are 8% to 34% more efficient. Additionally, because heat pump water heaters store their hot water, they can minimize energy usage during peak periods. | Potentially Cost- effective. Depends on age of existing equipment |
| Air Conditioner Replacement | High Efficiency Air Conditioner: Replace an existing air conditioner with a high efficiency air conditioner. -or- High Efficiency Heat Pump: Replace an existing air conditioner with a Heat Pump | When running air conditioners can be the biggest energy user in a home so installing high efficiency units can prevent higher bills. It is also important to ensure ducting is sealed and installed and filters are regularly changed. | Potentially Cost- effective. Depends on age of existing equipment |

Cost Effective Measures

Based on statewide cost effectiveness studies for our region the energy efficiency measures listed below were found to be cost effective for the location and age of the home shown in the table. Depending on your home's energy usage, individual measures may very but this list can provide a good recommendation on cost effective energy efficiency upgrades you can make to your home.

| Year Built | Climate Zone 7 Climate Zone 10 (91914) |
|------------|--|
| Pre-1978 | 1) LED Lighting |
| | 2) Water Heating Package 1) LED Lighting |
| | 3) R38 Attic Insulation 2) Water Heating Package |
| | 4) Duct Sealing 3) R38 Attic Insulation |
| | 4) Duct Sealing |
| 1978-2005 | 1) LED Lighting |
| | 5) Air Sealing 2) Water Heating Package |

Resources: Please review the resources listed below for information about home energy performance or energy efficiency resources.

- SDG&E Energy Savings Assistance Program The ESAP is an income qualified program that can make minor improvements to your home at no cost to you, such as insulation and appliance replacement, to help save energy. For full ESAP program eligibility requirements and application information, please visit www.sdge.com/esap or call 619-387-4757
- SDG&E Marketplace A website, <u>www.sdgemarketplace.com</u>, created by SDG&E that features thermostats, washers, dryers, refrigerators, surge protectors and lighting products with easy to shop at-a-glance product features, energy savings estimates and product reviews.
- Federal Weatherization Assistance A income qualified program can provide you with no cost weatherization to help you save energy and make your home more energy efficient. If you would like to find out if you qualify for this program please call (619) 409-7588 or visit MAAC's website www.maacproject.org/main/impact/healthy-homes-health-services/weatherization-services/.
- Home Energy Score Developed by the Department of Energy (DOE) and its national laboratories, the Home Energy Score provides home owners, buyers, and renters directly comparable and credible information about a home's energy use. Like a miles-per-gallon rating for a car, the Home Energy Score is based on a standard assessment of energy-related assets to easily compare energy use across the housing market. For more information please visit: www.homeenergyscore.gov.
- Go Green Financing To help residents find financing for energy saving projects the state created the Go Green Financing website: www.gogreenfinancing.com. This allows California residents and businesses to create a custom energy action plan, find rebates and incentives and find a financing option.

Questions? City staff are ready to help. If you have questions about your home or potential project please contact the City of Chula Vista's Conservation Section at 619-409-3893 or <u>conservation@chulavistaca.gov</u>.