Home Makeover Improvement Cost and "Pay-back" Table

	Item	Description	Approximate Cost Installed	Cost Reduction	Pay-back period
1	Photovoltaic Solar System	Panels placed on the roof of a home make electricity from the sun. The number of panels needed on a home will depend on how much sunlight strikes the roof and how much electricity generation is desired.	$10,000 to $50,000 or more depending on size and configuration.	50% or more of the cost can be reduced by federal and state tax incentives.	It should take 6 to 9 years for the cost to install to be "paid back" by savings on electric bills.
2	Solar Hot Water System	Panels placed on the roof of a home contain water pipes that collect the sun's energy to make hot water. About 40% of a typical home's electricity is used to make hot water. So using the sun to make free hot water will reduce a family's energy bills.	$5,000 to $10,000 depending on size and configuration.	50% or more of the cost can be reduced by federal and state tax incentives. Also, Hawaii Energy rebates are available for qualifying systems.	It should take 2 to 4 years for the cost to install to be "paid back" by savings on electric bills.
3	Roof Ridge Vent	By installing a vent at the ridge of a roof, hot air that collects in a home's attic can be reduced. This will keep a home cooler and can reduce the energy used to cool a home.	$2,500	NA	Savings will take place by reducing the cost to cool the home.
4	Solar Attic Fan	A roof vent that includes a fan powered by a small photovoltaic solar panel. The fan pulls hot air out of an attic and helps keep the home cool.	$1,000	$600 reduction by federal and state tax incentives	Savings will take place by reducing the cost to cool the home.

5	Thermal Barrier	A metallic fabric or panel that is installed under the roof to reduce the amount of heat that is transmitted from the roof into the home.	$2,500 ($2.50 per square foot)	NA	Savings will take place by reducing the cost to cool the home.
6	Energy Star Ceiling Fan	Fans can help push hot air out of the house, draw cooler air into the house and make the home feel cooler. They use much less energy than air conditioning systems	$60 to $160	$40	Savings will take place by reducing the cost to cool the home.
7	Window Shades	Reducing the direct sunlight that hits a window will slow heat from entering the house. Various kinds of shades and awnings are available. Even planting a tree to shade the window or home can help keep the home cool and livable.	Varies	NA	Savings will take place by reducing the cost to cool the home.
8	Energy Star Appliances	Refrigerators, dishwashers and clothes washers that meet strict government standards to operate efficiently using less energy.	$1,000 to $2,500 or more depending on size and features	$50 each	It may take 2 to 5 years for cost to be "paid-back" by electrical savings depending on the appliance.
9	Hot Water Pump	A small electrical pump typically installed under a sink to draw hot water to the faucet. This makes it unnecessary to turn on the hot water and let it run while waiting for it to get hot. The pump can conserve water and prevent the waste of energy.	$400	NA	"Pay-back" time will depend on how much hot water the home saves by installing the pump and the cost of making that hot water (whether by solar, or standard water heater).
10	CFL Light Bulbs	Compact fluorescent light bulbs use about ¼ of the electricity of old-style bulbs to produce the same amount of light.	$2 to $4 each	Rebates may be available for some bulbs.	A 13-Watt CFL, turned on 6 hours each day will "pay-back" its purchase price with energy savings in about 2 months when replacing a 60-Watt old-style bulb.

11	LED Light Bulbs	Light Emitting Diode bulbs use about 1/10 the electricity of old-style bulbs to produce the same amount of light.	$20 to $100 depending on the design.	Rebates may be available for some bulbs.	An 8-Watt LED turned on 6 hours each day will "pay-back" its purchase price with energy savings in about 2 years when replacing a 60-Watt old-style bulb.
12	"Smart" Power Strips	These power strips can include a timer or sensor that turns off all power to electrical devices when they are not in use. Most computers and TVs use power even when they are turned off. These power strips will eliminate this "phantom load" used by electronic devices.	$15 to $40 depending on size and features	NA	Turning off a typical entertainment center (cable box, TV, stereo and computer router) when not in use can save almost $10 per month.

13	Energy Monitor	A tool that will inform you how much energy is being used in your home at any time. By becoming aware of how much electricity is being used and how much it is costing at any time of day, residents will have the information they need to become wiser and more efficient consumers.	$150 to $300 depending on features of the monitor.	NA	Families that install an energy monitor are expected to save about 5% of their energy bill by becoming more aware of their costly habits. If so, the monitor may "pay- back" its cost in about two years.
14	Low-Flow Shower Heads	A low-flow shower head will reduce the amount of hot water used in a home. Because making hot water is the largest part of a home's energy bill, installing one can save you money.	$20 to $40	NA	By cutting your hot water usage by just 10% your home could save $5 to $10 each month in electricity. By using less water you will also reduce your water and sewer fees.