



**SEPTEMBER TIP PAYBACK: \$700-\$1,000/YR**  
**Avoided Emissions of CO<sub>2</sub>: Up to 3,300 lbs./YR**

# \$USTAINABILITY \$AVINGS TIP

## SOLAR OPPORTUNITIES SHINE

*Take advantage of our bountiful sunshine and tax credits to save green and be green.*

While days get noticeably shorter in September, there's still plenty of sunshine to keep our temperatures a bit uncomfortable – just another reminder that we get a lot of sunshine in Mesa - over 325 sun-drenched days a year. So why, when we look out the airplane window, or view our community with Google Earth, don't we see just as many (or more) solar panels as swimming pools?

### Here's a cost comparison of installing a pool vs. solar panels:

Expense/Payback	Swimming Pool	Solar Panels
<b>Installation</b>	\$35,000 (in-ground pool)	\$35,000 (5 kW system)
<b>Maintenance</b>	\$750/year	\$50/year (wash panels/inspect)
<b>Costs to Utilities</b> (water & energy)	\$750/year	\$1
<b>Savings</b>	\$0 (does offer pleasure & exercise)	\$700 to \$1,000/year
<b>Payback</b>	A deficit of \$35,000 + \$22,500-\$30,000 for maintenance costs over 15-20 years	Complete payoff of system 15-20 years with rebates

So if 'green' really is the new 'black', as they say, and solar panels are as much of a statement or status symbol as a swimming pool, perhaps that vision could become a reality. As declared by San Francisco architect Mark English, "Nothing screams I'M SAVING THE PLANET like a gleaming set of rooftop solar panels." But, English also warns that before even considering solar for the energy savings, it is best to invest in improving energy efficiency in your home.

The good news is that tax credits are available for both energy improvements and renewable energy purchases.

### Here's a sampling of projects with rebates/incentives available:

Energy Saving Project	Improvement	Federal	State	SRP Utility*
<b>Lighting</b>	Compact Fluorescent Bulbs (CFL's)			Discounts available at participating stores for CFL's
<b>Appliances</b>	Energy Star labeled**		Stimulus funds may soon provide additional appliance rebates	Clothes washer up to \$75 Dishwasher \$20 Refrigerators \$30, free pick up & recycle old unit
<b>Water Heater (electric, gas &amp; solar) see rebates from gas providers pg. 2</b>	Energy Star labeled**	30% up to \$1,500 (gas or electric) 30% no cap (solar)	25% up to \$1,000 (solar)	\$0.50 per kilowatt hour of energy savings (OG-300 rating), no cap (solar)
<b>Insulation</b>	Attic, wall, or floor	30% up to \$1,500		
<b>Windows/Shade Screens</b>	Dual pane, low-e glass	30% up to \$1,500		Shade Screens \$3/sq. ft.
<b>Heating/Ventilation/AC (HVAC)</b>	SEER of 14 or greater Duct sealing, etc.	30% up to \$1,500		SEER of 15 or greater up to \$400
<b>Solar Electric</b>	Provide part or all renewable energy	30% no cap	25% up to \$1,000	\$2.70 for installed watt up to \$13,500

Not included in the table above are rebates from your Natural Gas provider. The City of Mesa Gas Utility currently provides rebates for the purchase of new gas water heaters (\$25) and pool or spa heaters (\$50) (note: the State provides a rebate for a solar pool or spa heater). If you are a customer of Southwest Gas, they also provide a rebate for water heaters (\$75). Natural gas is the cleanest of all fossil fuels, and while it is not a renewable resource, it does provide more value for your energy dollar.

## CHECKLIST FOR SAVINGS

- Visit [www.mesaaz.gov/sustainability](http://www.mesaaz.gov/sustainability) to find links to SRP, State, and Federal rebates or tax credits. There are also links for simple tips to reduce your energy consumption.
- Attend one of the monthly **Living Green Workshop Series** programs to learn more about landscaping and energy conservation. Our September 12 program is titled **How to Go Solar: Renewable Energy for Your Home**. For a list of all programs visit [www.mesaaz.gov/sustainability](http://www.mesaaz.gov/sustainability).
- Visit the City of Mesa library for books on solar and energy efficiency. See our recommended list of books at [www.mesalibrary.org/research/links/living-green.aspx](http://www.mesalibrary.org/research/links/living-green.aspx).
- Instead of installing a pool, check out Mesa’s cool public swimming pools at [www.mesaaz.gov/parksrec/aquatics/default.aspx](http://www.mesaaz.gov/parksrec/aquatics/default.aspx), and plan your solar install.

## HIDDEN INCENTIVES YOU MAY NOT KNOW ABOUT

- **Arizona Property Tax Exemption:** Exempts from taxation the amount of the appraised property value that arises from the installation of a solar or other renewable energy system.
- **City of Mesa Energy Improvement Incentive:** Saves you time and money by exempting permit requirements for energy efficiency or renewable energy improvements such as solar systems, HVAC replacements, and water heater replacements.

## START SAVING

Start saving on energy costs, while doing your part for *building a sustainable community*.

*\* While SRP is the predominant electric provider for Mesa residents, the City of Mesa supplies electric service to about 16,000 customers in the 5.5 square mile area centered in downtown Mesa. While Mesa currently offers incentives only for natural gas water heaters and pool/spa heaters, we continue to provide educational information and evaluate whether programs such as rebates and other incentives are appropriate. Mesa is currently developing a voluntary rate that would contribute to the electric utility’s development of utility-scale solar energy facilities similar to a “community garden”. This program will enable customers to sponsor a portion of the electric energy supplies with the most efficient, reliable and economical solar energy technologies.*

*\*\*When purchasing any appliance be sure to look for the Energy Star label, indicating that it uses 10-50% less energy than standard models. Think about products having two price tags: The original purchase price and the cost to operate each month.*

Based on standard U.S. Government tests

# ENERGYGUIDE

Refrigerator-Freezer  
With Automatic Defrost  
With Side-Mounted Freezer  
Without Through-the-Door-Ice Service

XYZ Corporation  
Model ABC-W  
Capacity: 23 Cubic Feet

**Compare the Energy Use of this Refrigerator with Others before You Buy.**

This Model Uses  
**776** kWh/year

Energy Use (kWh/year) range of all similar models

Uses Least Energy <b>742</b>	Uses Most Energy <b>836</b>
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kWh/year (kilowatt-hours per year) is a measure of energy (electricity) use. Your utility company uses it to compute your bill. Only models with 22.5 to 24.4 cubic feet and the above features are used in this scale.

Refrigerators using more energy cost more to operate. This model's estimated yearly operating cost is:

**\$68**

Based on a 1992 U.S. Government national average cost of 8.24¢ per kWh for electricity. Your actual operating cost will vary depending on your local utility rates and your use of the product.

Number Printed at the End of the Label before a Column of Figures is (10-911-000).



*Don't confuse the bright yellow and black label developed by the U.S. Department of Energy with the ENERGY STAR label. EnergyGuide labels feature energy use and operating cost information to help shoppers compare appliance models, while an ENERGY STAR label marks appliances with superior energy efficiency.*



*Learn to live Green*