

# Residential Solar/PV Systems

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# What are your goals?

- Reduce Electricity Bill?
- Eliminate Electricity Bill?
- Never send another cent to your utility provider?

# Is your residence an ideal location for a Solar/PV System?

- Do you have a south facing roof with adequate surface area? (5kW-10kW requires roughly 600-1200sq/ft)
- What is the current condition of your roof? (keep in mind a Solar/PV system has a life span of 25+ years)
- Are there any shading obstructions? (trees, power lines, chimney, ect)
- How far away is the grid-tie? (the closer the better)
- Does your local HOA allow Solar/PV? (some do not)

# Cost and Incentives for a residential Solar/PV System

- 5kW-10kW Solar/PV System will cost roughly \$3.00 - \$3.50 a Watt (turnkey). Thus, \$15,000-\$35,000.
- Federal tax credit of 30% of total cost of system.
- TVA incentive of \$1000.00 after commissioning of system.
- TVA to purchase “green energy” at a premium. Current premium is expired. New program/premium will go into effect on 1/1/13.
- New 2013 premium will be .09 on top of GSA 1 rate for the first 10yrs of the contract and regular GSA 1 rate for the second 10yrs of the contract.
- ROI for residential Solar/PV system to be roughly between 7-10yrs.

# Conclusion

- If you're just trying to reduce your monthly electricity bill.. Solar/PV might be too costly. Energy Efficiency initiatives might be a more practical solution. (every \$1 spent on EE is equal to \$4 spent on Solar/PV)
- If you're trying to eliminate your monthly electricity bill.. a hybrid solution of Energy Efficiency and Solar/PV would be the best solution. The more energy efficient your home is, the less money you will have to spend on a Solar/PV system.
- If you're trying to completely energy independent from any local/federal utility.. Energy Efficiency, Solar/PV and a battery based back-up system are your best solution. However, this avenue will be the most expensive and have the longest ROI.

# Thank you!

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