

ESCI 61 Homework #1**Student Name:**

Chose a place (home or small business) where you plan to install a photovoltaic system. You must have the electricity bills of this place for at least 12 months, 24 months is better.

1. Work on your utility bills of your place and determine the average electricity usage; make sure you report electricity usage per tier (please refer to class material); this is important to in case you have a heavy electricity usage, and you cannot offset all of it with a PV system.
Please provide a table that summarizes electricity usage from your last 24 bills.
2. Walk through your place and report all possible actions you can take in order to reduce your electricity usage; calculate the amount of electricity usage reduction per year if you implement all these actions; please refer to class material in order to determine how to calculate electricity usage of your appliances.
Please provide a bottom line of electricity usage per tier after energy conservation measures are implemented. This usage will guide the design and sizing of your photovoltaic system.