If you are considering installing a photovoltaic or “PV” system, but do not yet use a solar water-heating system, determine if adding a solar water heater first is a better initial investment. The pursuit of installing photovoltaic (PV) panels on rooftops to cut down monthly electric bills remains popular, and unfortunately some are using that interest to capitalize off of unsuspecting consumers. Do not be afraid to ask many questions, and also double check with the utility company to verify that everything sounds legitimate and will follow their proper procedure. Here are a couple of tips when looking into adopting PV:

**GET MULTIPLE QUOTES**
Try to get at least three, if not more. With so much competition out there for your business, not only will getting multiple quotes help you get the best price, but it will allow you to determine who might be more knowledgeable and experienced in PV installations. It may also give you a sense of who may be attempting to take advantage of you.

**UNDERSTAND ALL TERMS**
Once you get the contract in writing, make sure you understand all the terms before you sign. What’s being guaranteed? With so many components in a PV system, one part may be covered under warranty by one company, while another is covered by a completely separate entity. Will the installation void your roofing warranty? You may want to double check with your roofer first. There are also a variety of financing options when it comes to PV. Leasing, power purchase agreements, loans, all probably look attractive on paper, but make sure you understand the costs involved.

**SIZE IT RIGHT**
When purchasing a PV system, make sure you are not buying more panels than you really need to be cost effective. While not all will engage in such practices, understand the possibility of a seller boosting their profit margin by suggesting more panels than you actually need, or placing panels in areas that may not be cost effective because they are shaded.

The National Renewable Energy Laboratory (NREL) has an online calculator tool to help estimate the performance and cost of PV systems. ([http://pvwatts.nrel.gov](http://pvwatts.nrel.gov)) The Hawaii State Energy Office also publishes solar maps to help areas determine how many peak sun hours they can expect on a typical day.

500=5.8 hrs, 400=4.6 hrs, 300=3.5 hrs.

Download and view the maps at: [http://energy.hawaii.gov/resources/hawaii-state-energy-office-publications#solar](http://energy.hawaii.gov/resources/hawaii-state-energy-office-publications#solar)

**CHECK WITH THE UTILITY FIRST**
The utility is unable to accept more PV customers in some areas at the moment, so double check that you are eligible to connect before you put any money down. While Oahu customers can check their area’s circuit to see if it is full through the Locational Value Map on HECO’s website ([http://hawaiianelectric.com/portal/site/heco/lvmsearch](http://hawaiianelectric.com/portal/site/heco/lvmsearch)), it is advised to contact the utility directly for the most up to date information. With growing popularity of PV installations, it is still possible that changes in penetration occur while preparing your application, and you may miss the cutoff before your Net Energy Metering (NEM) agreement is approved. Contacting the utility or submitting an application does not reserve a spot to interconnect.

**NO ONE HAS A SPECIAL RELATIONSHIP WITH THE UTILITY**
If a contractor claims to have a special arrangement with the utility to get you interconnected, it is a lie. No individual or company has any advantage or agreement with the electric utilities to jump the queue. Customers told information along these lines should be wary of the next tip below.
DO NOT HOOK UP ILLEGALLY
Some folks are telling customers it is okay to just go ahead and flip the switch on their PV systems without a proper NEM agreement in place with the utility. This is not true and can be dangerous for your home, neighbors, and utility workers. The utility is aware of “rogue” PV systems and is taking steps to crack down on customers that connect their systems without a proper NEM agreement. Customers in violation risk disconnection of their PV systems and electric service.

HIRE A LICENSED CONTRACTOR
Trying to cut costs by taking up an offer from an unlicensed worker is playing with fire. Do it right and hire a reputable licensed contractor to avoid headaches. You will have peace of mind knowing that the expert is filing for the proper permits and approval from the city and utility.

HOW DO I KNOW IF A CONTRACTOR IS LICENSED?
The Department of Commerce and Consumer Affairs (DCCA) and its Regulated Industries Complaints Office (RICO) is a great resource to check on businesses and individuals.

Professional and Vocational license search:
Search for information about professionals licensed by DCCA, including contractors, electricians, plumbers, and the companies they work for.

RICO complaint history search:
Search Regulated Industries Complaints Office complaints information for information about complaints filed against licensees and for information about unlicensed activity investigations.

Office of Consumer Protection complaint history search:
Search Office of Consumer Protection information for complaints about unfair and deceptive trade practices.

Business Registration name search:
Search for information about businesses registered with the Business Registration Division. Look at: 1) when the business was established, 2) the names of the people involved in the business, and 3) any previous names of the business. Names gathered from this search can be used to search for licensing and complaints history information.

Please visit:
http://cca.hawaii.gov/rico/business_online/
Or give RICO a call at (808) 587-4272.

Division of Consumer Advocacy
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cca.hawaii.gov/dca
www.facebook.com/HIConsumerAdvocate

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