



Solar Component of
Build San Antonio Green®

Solar Potential Evaluations

- Build San Antonio Green® has the ability to determine solar exposure for specific sites anywhere in our region.
- Build San Antonio Green® field personnel can evaluate solar exposure for specific sites
- Estimate the expected energy produced in terms of kilowatt-hours for photovoltaics, and BTUs produced for solar hot water.
- BSAG staff conducts Solar Potential Evaluations in several of the Family of Programs



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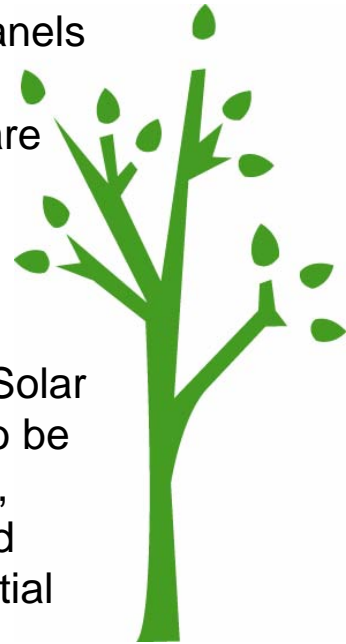
New Construction



- **Level 2 – Solar Ready Option:** Level 2 integrates ENERGY STAR certification as a requirement and is 30% above current code. Level 2 is designed to be a “solar-ready” home, meaning the homeowner can add Solar Photovoltaic panels and/or solar hot water later if they so desire. If the “Solar Ready” option is selected, BSAG staff perform a Solar Potential Evaluation, and the results are included in the Homeowner’s Manual.



- **Level 3 – Solar Home:** Level 3 is designed to be a solar-powered home. Solar energy will be required for all Level 3 homes. These homes are expected to be net-zero energy homes, meaning they should produce as much, if not more, energy than they consume. Level 3 is also aimed at production builders and developers and is in a checklist format. BSAG staff conducts a Solar Potential Evaluation for the builder.



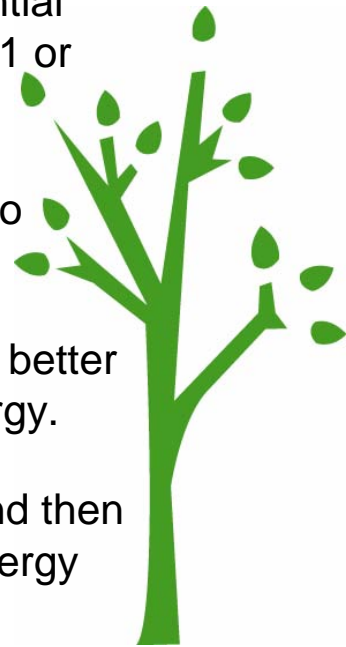
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Green Retrofit



The Green Retrofit Program is designed to retrofit homes in the categories of Energy, Water, Site, Material and Health. Under the BSAG Green Retrofit Program, Solar Potential Evaluations are required for the Level 3 Solar Home. Solar Potential Evaluations are an option that can be added to either Green Retrofit Level 1 or Green Retrofit Level 2 projects.

- Green Retrofit Level 1 – Designed for the homes' pre-retrofit HERS Index to improve by 30% in Energy.
- Green Retrofit Level 2 – Designed to bring the house up to current code or better by requiring the homes' pre-retrofit HERS Index to improve by 50% in Energy.
- Green Retrofit Level 3 – Designed to bring the house up to current code and then increase efficiency to at least 50% above current code in energy. Solar energy systems are required.



Making Your Home “Solar Ready”

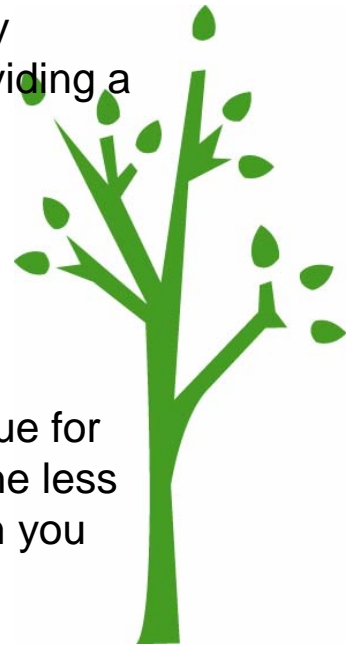


What is “Solar Ready”?

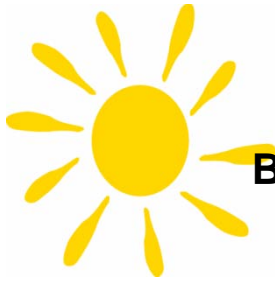
- “Solar ready” means preparing a house for the installation of a solar energy system. This means optimizing the energy efficiency of the home and providing a location for equipment and wiring.

Why Make Your Home “Solar Ready”?

- Making your home solar ready makes the solar energy system a better value for your budget. The more efficient your home, the less energy it requires. The less energy your home requires, the smaller the size of the solar energy system you will have to buy.

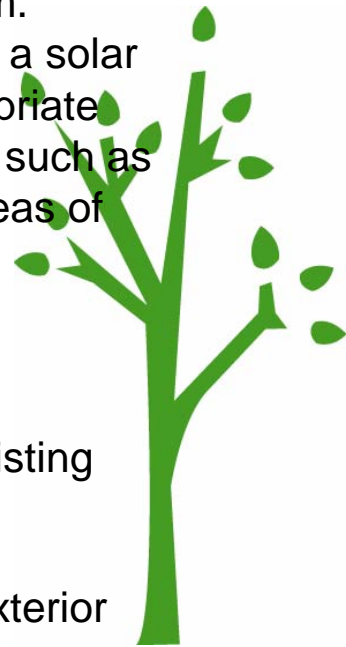


Making Your Home “Solar Ready”



Building Envelope – This refers to the roof, walls, windows and doors of the home.

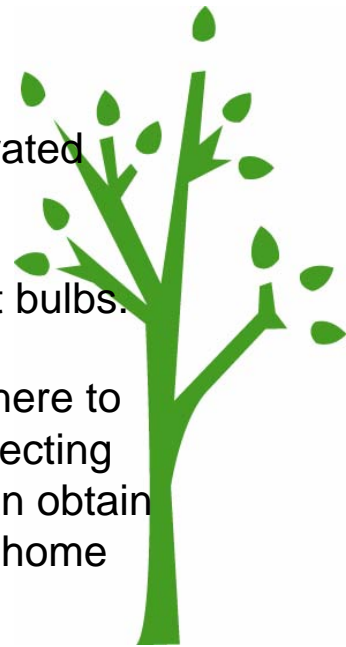
- **Roof** - Roofing material should be selected to not only for energy efficiency, but for durability when installing and supporting the solar energy system. Examine the roof to make sure it has adequate exposure to the sun for a solar energy system to function properly. If there are problems finding appropriate areas on the roof of your home, you have the option to build structures such as arbors, trellises, garden sheds, or gazebos which may be located in areas of your yard with more favorable solar exposure.
- **Walls** - Adequate insulation should be installed in the walls.
- **Windows** - Install low-E glass windows or install solar screens over existing windows to limit heat infiltration.
- **Doors** - Make sure adequate weather-stripping is in place around all exterior doors.



Making Your Home “Solar Ready”



- **Home Energy Rating** - Contact a RESNET-certified home energy rater to perform a thorough audit and make pinpoint recommendations how your home could be made more energy efficient. Depending on where a home is deficient, upgrades should be performed. A list of qualified raters may be found at <http://www.natresnet.org/directory/raters.aspx>
- **Appliances** - Replace old or inefficient appliances with ENERGY STAR® rated appliances.
- **Lighting** - Fixtures should be fitted with fluorescent or compact fluorescent bulbs.
- **Equipment Location** - Provide areas in your utility room, garage or elsewhere to install the inverter and other related equipment. Remember if you are connecting your PV system to the house panel, being a CPS Energy customer, you can obtain credit for the excess energy you produce when it exceeds the energy your home demands. There will be no need at all for expensive batteries..





QUESTIONS?



Thank You!