

Options for Solar and Wind Energy

Solar Grid-Tie

- Connecting the solar system directly to the utility grid allows you to use all the power generated by the solar panels and sell back any surplus.
- Uses a bidirectional utility meter to record the surplus power generated.
- No batteries to purchase or maintain, and no moving components to wear out.
- Panels can be roof or ground mounted.
- Uses the least amount of system components.
- Components of system have manufactures warranty up to 20/30 years.
- Offers the best rate of return.
- New in 2014, inverters now allow you to use the solar power when the utility power goes down.

Solar Off-Grid

- Ideal for locations where grid power is not available or too expensive to install.
- Allows you to have power when the utility grid goes down day and night.
- Batteries for this system last about 7 years.
- Panels can be roof or ground mounted.
- Systems are easily expandable to meet additional power needs.
- Utility does not need to be involved.
- An electrical transfer switch can be installed to allow the flexibility to use both solar and utility power.
- These systems can also work as back-up power, eliminating the need for a gas powered generator.
- A back-up gas generator can be added to work with the system.

Wind Power

- Generating power with wind can be done by either grid-tie and off-grid.
- Small wind turbines 500 to 1000 Watt are best suited for off-grid battery charging applications.
- Careful consideration for location and placement are needed to be certain enough wind is available.
- Wind turbines often require large towers.
- Many wind turbines require scheduled maintenance.
- Lifespan of most wind turbines is short compared to solar, with manufacture's warranties at 3-5 years.

Hybrid System

- Combines the best from grid-tied and off-grid solar systems.
- Can include either solar and wind generation and grid-tie and off-grid flexibility.
- Ideal for those that want to reduce their electric bill and have back-up power available.
- The availability of high quality electrical components has made almost any project possible.

