

Sustainable Solar for the Hospitality Industry

Today's consumers are embracing and demanding sustainable energy practices and they look to the hospitality industry to do the same to earn their initial business and long term loyalty.

SunTech Drive's load optimized solar technology is ideally suited for hotel and resort style properties. A major limitation of current solutions is that solar power installation designs are compromised by having to accommodate large energy swing loads such as pool pumps and HVAC systems. The SunTech architecture not only isolates these dominating loads from the rest of the solar system or power grid, it further optimizes the efficiency of these systems by applying variable frequency drive controls to each system. As an example, the additional energy savings achieved by utilizing a variable frequency drive in conjunction with a pool pump are in the 50-70% range. Hospitality properties would benefit from a three to five year payback.

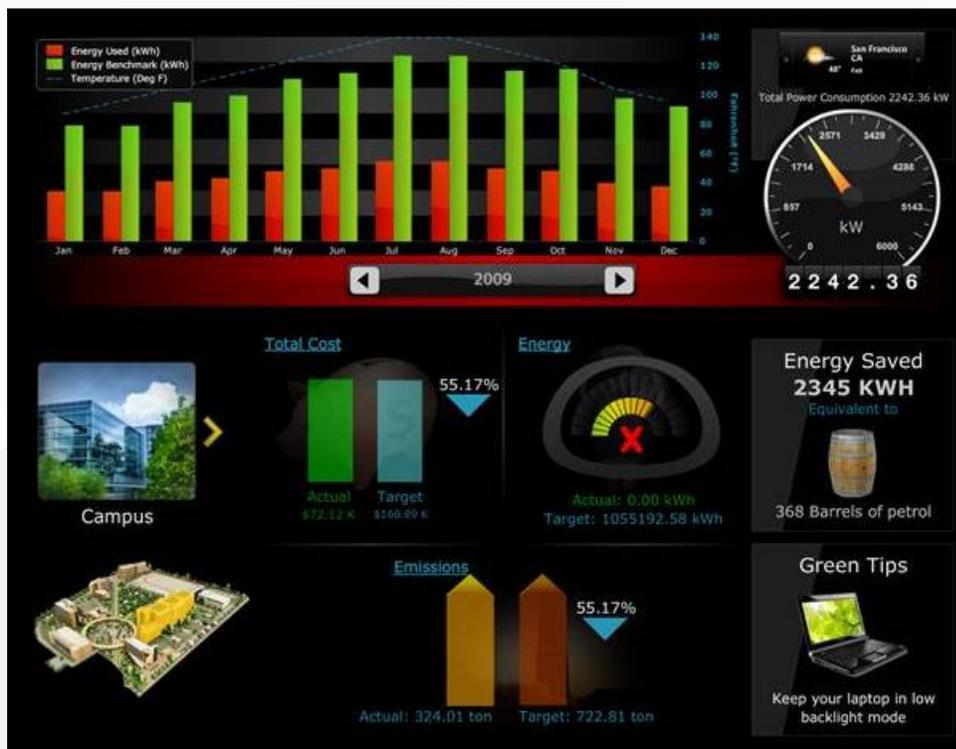
Targeted Loads:

- Pool Pumps
- Micro Split HVAC units
- Pool Heaters
- Decorative Water Features

Hospitality Applications:

- Golf Courses
- Spas
- Villa Pools

FULL WIRELESS COMMAND, CONTROL AND CUSTOMER DISPLAYS



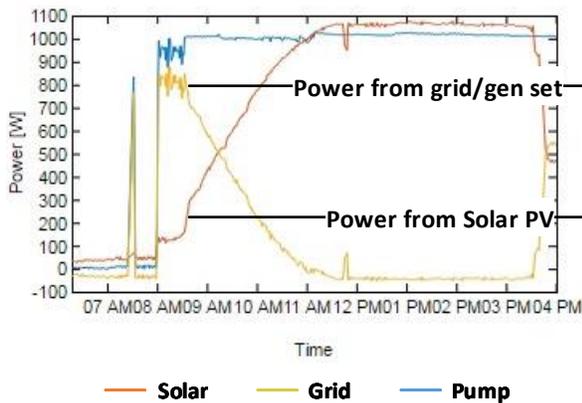
Representative display for hotel lobby guests

In addition to generating significant energy savings, these initiatives can now be shared with customers via live infographic displays and browser based apps. A display mounted poolside or in the lobby can now explain the facility's sustainable configuration along with real time graphs showing the energy saved, the carbon savings being generated displayed as equivalent trees, auto miles, etc.

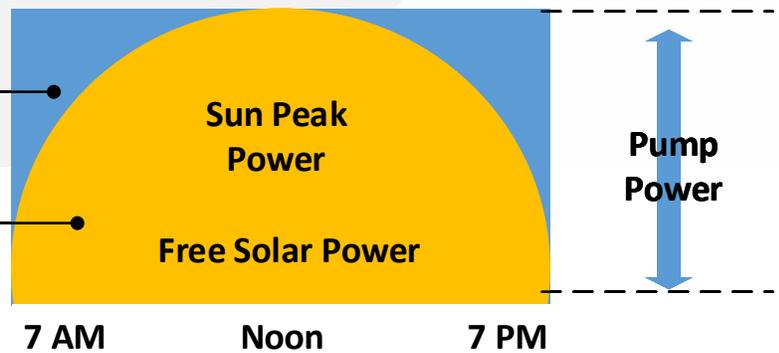
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DRAMATIC ENERGY SAVINGS WITH NO COMPROMISES ON PERFORMANCE

Field validation:

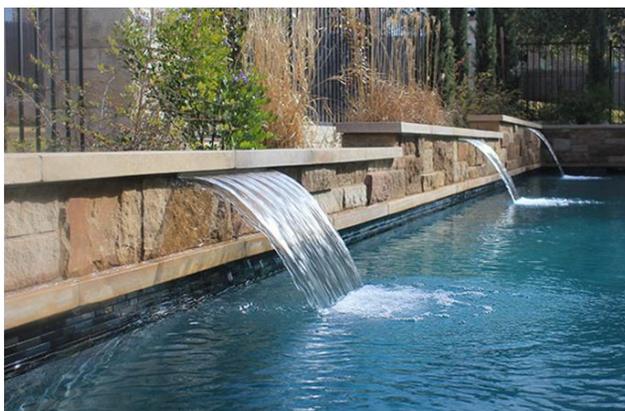


Conceptual:



A unique and patented feature of the SunTech architecture is the ability to blend power in real time between solar PV and either the power grid or a diesel genset. Unlike other simple switching architectures that simply switch back and forth in the mornings and evenings between solar and traditional power sources, this system actually blends between the two in real time so that even when a cloud passes over the pump, HVAC or other load, it continues to operate at 100% capacity. Other systems will turn the load off or slow it down as solar irradiance varies with the weather, thus reducing your pool sanitation or HVAC performance. SunTech keeps your guests comfortable while reducing energy OPEX and providing the sustainable facility that the market demands.

POOLS AND OTHER WATER FEATURES



Pools, spas and decorative water features are a great place to start because they are inherently customer facing. Not only do they represent a wonderful way to showcase your investment, they also represent one of the highest returns on investment to go solar. By incorporating solar energy, variable frequency drive and power blending technology it offers all of the leading edge aspects of sustainable energy in one integrated offering.

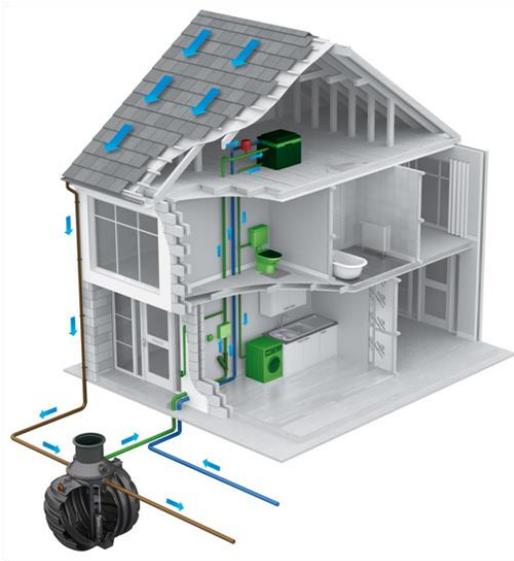
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MICRO SPLIT HVAC UNITS



Micro split HVAC units are ubiquitous in many parts of the world and an ideal solution for distributed bungalows and cabins. The SunTech architecture can shift the operation of these to solar during daytime hours and also operate them 50% more efficiently off of the grid or generator in the evenings.

RAINWATER AND GRAYWATER REUSE



Greywater and rainwater reuse is an integral part of any sustainability initiative. Since these systems are based on fractional HP pumps, they represent an ideal target application for SunTech's load facing renewable architecture.

QUALIFIES FOR REBATES AND INVESTMENT TAX CREDITS

The system is primarily solar powered, it qualifies for a variety of state specific rebates on solar pool pumps, pool heaters and solar hot water systems. The entire system also qualifies for federal ITC programs.

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