

**The Green Energy Newsletter,**

Written by Architects and Engineers - for Architects, Builders, Developers &amp; Real Estate Professionals.

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**SOLAR HOT WATER SIMPLIFIED:** It's relatively easy to let the Sun make hot water for us. Yet, for many contractors, architects and developers Solar Heated Domestic Water (**SHDW**) is one "low hanging fruit" that is largely ignored. The hot tickets, which thrill us are new technology like photo-voltaic power or maybe even solar thermal power generation, but solar domestic water heating seems "old fashioned" and is often the last thing that residential designers want to think about when designing a home. For me at least, it reminds me of the 1970's, Woodstock, hippies, "getting back to the land", etc.

But the real truth is that in 30 years Solar Water Heating has blossomed and today it is a mainstream sustainable energy efficiency industry. It is time for a second look. Today, changing over to Solar Heated Domestic Water (SHDW) is one of the easiest, and least expensive ways to save energy costs and truly "green" up a design. When your client wants a "SOLAR HOUSE" but gets blown away at the exorbitant cost of Photo-Voltaic (which even after the current "stimulus Package" rebates still costs a fortune, and the un-rebated portion has a 30 year pay-back) you can offer them Solar Heated Domestic Water as an honest solar system which is also inexpensive. Where P-V has a 5-19% efficiency, SHDW has a 50-70% efficiency. When clients start hearing 70% efficiency they will suddenly get interested.

**WHERE TO FIND OUT:** There is a great series of Do-It-Yourself (DIY) articles, which Architects will find useful in understanding what the General Contractor's Solar Installer sub is trying to accomplish. Go on line <http://www.homepower.com/home/> to Home Power Magazine, and sign up for a one year E-subscription (\$9.95). Next, you can download several articles, which will tell you what you need to know. I especially liked the one on System Sizing and Payback as compared to Photo-Voltaic.

- PV vs Solar Water Heating: Simple Solar Pay Back.
- Sizing Solar Hot Water Systems
- Solar Simplified Hot Water
- Solar Hot Water: A Primer
- Do-It-Yourself Tips for Solar Water Heat
- Single Tank Solar Water Systems

**FINALLY:** Look at the TAX CREDIT REBATES allowed for a solar water heating system as compared to any other water heating system.

- ELECTRIC WATER HEATERS: NO TAX CREDIT for conventional electric storage water heaters or electric tankless water.
- HEAT PUMP WATER HEATERS: There is a tax credit for electric heat pump water heaters for 2009 and 2010 for 30% of the cost, up to \$1,500. ENERGY STAR qualified electric heat pump water heaters are expected to reach the market in late-2009.
- GAS, OIL & PROPANE WATER HEATERS: There are also tax credits for gas, oil and propane water heaters (30% up to \$1,500 in 2009 & 2010).
- SOLAR WATER HEATERS: solar water heaters (**30% of the cost, NO MATTER HOW MUCH IT COSTS** (no upper limit), **through 2016**).

**REMEMBER WE DO TITLE 24** - If you have questions on any aspect of Green Energy, Sustainability, LEED, Green Point Ratings or Title 24, simply give Alan or Mark a call at **(415 391-0186)** to discuss your Title 24 documentation needs or any Green Energy Subject. **We provide the best Title 24 service in California**, through the synergism of an Architect and an Energy Engineer working together to enhance your project.