

# Macro Use Of A Micro Technology

**The Public, Environmental Organizations, Solar Dealers, Wholesalers and Solar Manufacturers need to work together to get the message out to Government Energy Officials that Solar Water Heating is a Huge Source of Low Cost Clean POWER and not just a “Conservation” measure.**

**Example: Solar Water heaters could reduce California’s energy consumption by over 2% and do enormous good for it’s economy and environment, now that POWER!**

**Macro use of solar water heaters not only reduce energy demand and pollution, but millions of them installed to supplement gas water heaters frees up large amounts of natural gas to be used to create electricity. When gas use is reduced, the gas thus displaced is available to be used efficiently in gas turbines to produce electricity. Thus, albeit indirectly, solar water heating can be used to create very significant quantities of Electricity while cutting Pollution in half!**

**Solar Water heating is 4 to 8 times more cost effective per BTU created than the popular Solar Photovoltaic power systems.** Today, converting sunlight into electricity is four times as expensive as coal or gas power. Solar water heating, however, is directly competitive right now with coal or natural gas and the ratios are only getting better as energy costs go up.

**Solar Water Heating is ideal when combined with Photovoltaic (PV) panels.** One 40 square foot solar system produces an average of 10kWh of energy per day, either by displacing electricity or gas use. Solar water heating is the perfect complement to a Photovoltaic system because it can double, the energy output of an average 1 to 4kW system at a fraction of the cost.

**Solar water heating is cost effective enough to help Utilities and cities subsidize their PV and other energy efficiency programs.** Incentives to the Utility include making money, maintaining customer loyalty, Demand Side Management, good publicity, **pollution mitigation** (which may be State/Federally mandated), potential pollution tax credits and 15% federal solar tax credit. With an energy efficient mortgage, it may increase the amount of home customers qualify for and be an instantaneous positive cash flow by saving more per month than the mortgage increase.

## **Need and Opportunity:**

The **Los Angeles Air Quality Control Management** has stated, “next to car pooling, solar water heating is the most cost-effective way to reduce air pollution.” Each solar water heater installed saves about as much energy as an economy car uses in a year. The **LA Dept. of Water and Power** announced that their new utility green power program “is the beginning of a fundamental shift...away from fossil fuels and nuclear power towards cleaner energy”. A **San Francisco program** aims to reduce their peak load of 950 MW. 350,000 solar water heaters could reduce this demand by 25%. 350,000 solar water heaters is a reasonable amount of solar heaters to install in the San Francisco area. The same principle applies to cities across America and the World.

**Large banking and insurance concerns have suffered massive losses that have been attributed to global warming.** The perception by many is that fossil fuel burning has caused global warming and that there is a need for serious measures to be taken. Otherwise, even greater catastrophic losses are predicted. These banking and insurance concerns have a combined power that greatly outweighs the gas, coal and petroleum industries power.

Major government low-income weatherization programs are making use of solar water heaters. Private housing programs such as Habitat for Humanity are starting to install solar water heaters as a way to reduce home ownership costs.

**Solar Water Heating is POWER! We need help in developing momentum for this enormous opportunity, Please call if you would like to support this effort, lets work together to make a plan for the Good of all.**

*Thank you, Al E. Rich, President, SolarRoofs.com Inc.*

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