



GET THE SOLAR BOOST

TRANSOPTIC SOLAR HOT WATER

GET COMFORTABLE WITH THE SOLAR BOOST

HOMEOWNERS are seeking natural ways to decrease the 30% of their home's total energy bill that goes to heat water. The temperate climate of the San Francisco Bay Area is perfect for solar thermal generated hot water. In all households, people demand safety, reliability and convenience from their hot water systems.

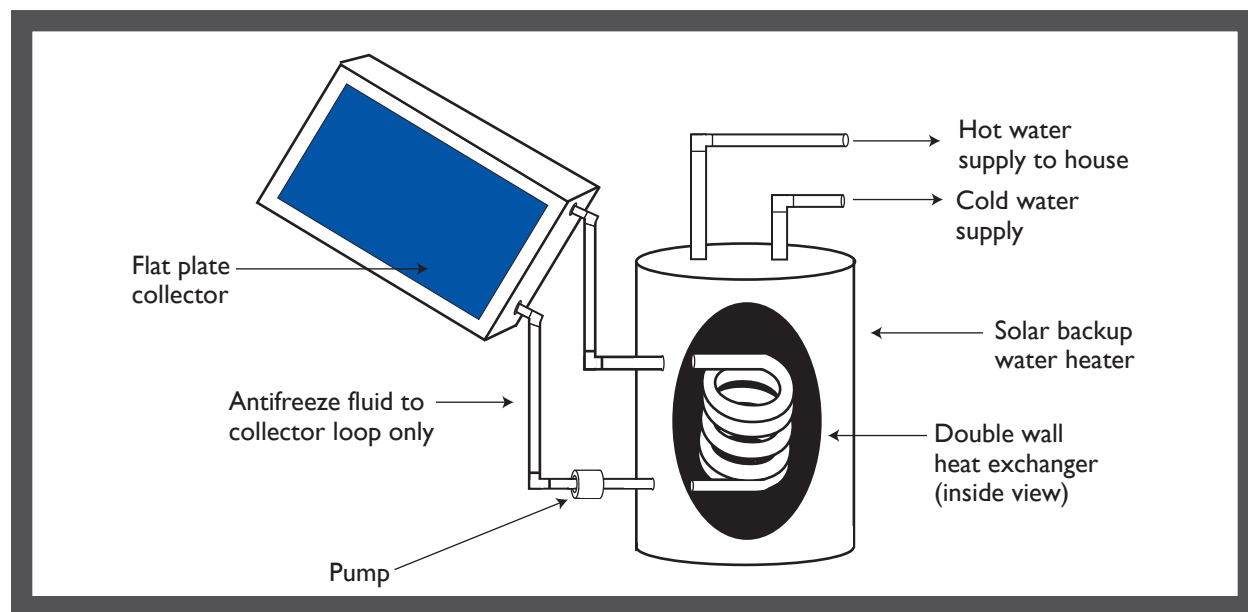
Patented Transoptic Solar systems will give your family a comfortably hot shower, clean clothes, clean dishes and clean hands, and then put money in your wallet every month, through reduced utility bills.

In-home water consumption and water bills can also be dramatically reduced by reducing wait times for hot water through heat recovery pipe wraps and hot water pipe insulation. Cutting back usage reduces water and sewer bills and is great for the environment, especially in drought years.

GET COMPETITIVE WITH THE SOLAR EDGE

BUSINESSES are seeking economical ways to decrease their utility, water and sewage bills in the restaurant kitchen, garage, factory, shop and laundromat. Hot water gets the grease off! Water is a natural solvent!

TRANSOPTIC SOLAR'S answer to all of these renewable energy needs is an energy efficiency makeover capped with the installation of **SOLAR PRE-HEATING** which works with your existing hot water heater (gas or electric) to make the world a better place, one roof at a time.



Active, Closed Loop Solar Water Heater

GET THE SOLAR BOOST!



1

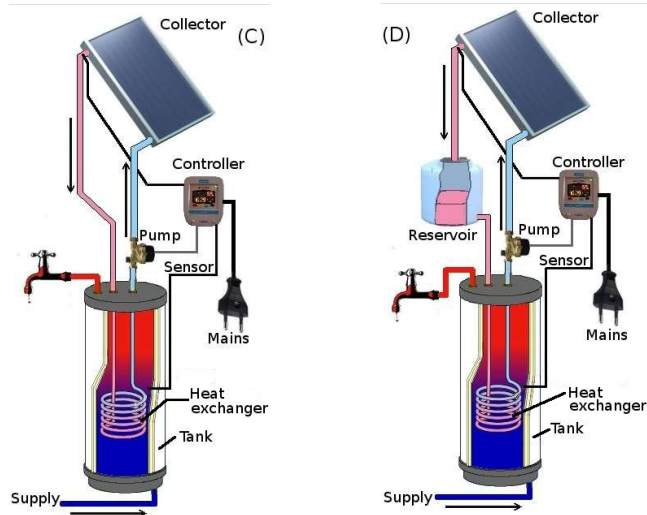
INDUSTRY LEADING TECHNOLOGY:

We offer innovative vacuum tube collector and flat plate generated hot water systems. Cascaded systems offer seasonal flexibility and will boost water temperatures to safe and/or extreme industrial strength temperatures.
Hybrid Hot Water/PV Systems

LOWER ENERGY, WATER AND SEWER BILLS

A solar booster system means your conventional hot water heater can loaf around while you enjoy reduced PG&E bills and the peace of mind that comes with knowing you're saving the environment and money too.

2



Indirect active systems: (C) Indirect system with heat exchanger in tank: (D) Drainback system with drainback reservoir. In these schematics the controller and pump are driven by main electricity

3

A MONEY SAVING SYSTEM

Our systems are designed to last 25 years or more (inverters guaranteed for 10 years-prorated). Your system pays for itself in as few as 16 years.
Hot water systems are eligible for CA State rebates and Federal tax credits
Add to your home's value without increasing the tax burden

GO NATURAL WITH TRANSOPTIC SOLAR

TRANSOPTIC HYBRID SOLAR SYSTEMS

THE TOTAL APPROACH TO SOLAR POWER

Transoptic is an innovative solar system delivering high performance solar energy when traditional PV systems bog down - during heat waves. The fluid underneath the solar cells cools the PV system, resulting in peak performance year round.

CHOOSE TRANSOPTIC SOLAR FOR:

- **HIGH EFFICIENCY:** One solar installation can give you free hot water and electricity.
- **RELIABILITY:** Fewer parts and weather proof connections for minimal maintenance.
- **GREAT DESIGN:** Light weight system never stresses the roof.
- **WARRANTY:** Industry leading warranties and designed-in ease of maintenance.

4

PRESERVE THE ENVIRONMENT & PREVENT GLOBAL WARMING:

Eliminate tons of carbon dioxide emissions from excessive natural gas consumption. Reduce the need for gas exploration and drilling in sensitive habitats across the West

5

WE CAN ENHANCE THE BOTTOM LINE & REDUCE YOUR ENVIRONMENTAL FOOTPRINT BEST IF....:

Your roof is shade free from nine 'til three.
Your roof is walkable and suitably oriented and tilted.
Your main panel isn't already maxed out with breakers.
You haven't already got a tankless water heater and a slab foundation.

ABOUT TRANSOPTIC SOLAR

Founded in 1993, Transoptic Solar is a fast growing installer of residential and commercial solar power systems headquartered in Redwood City, California, a city where the climate is best by government test.

**CALL TODAY FOR A FREE SOLAR
HOT WATER EVALUATION!**

Contact Transoptic today at (650) 703-9733 and one of our experienced solar power technicians will calendar a home visit for a free evaluation. Call Transoptic Solar to get the SOLAR BOOST. Click www.transoptic.com

Daily energy production (kWth.h) of five solar thermal systems.
The evac tube systems used below both have 20 tubes

Technology	Evac tube	Evac tube	Flat plate	Flat plate	Flat plate
Configuration	Indirect active ^[37]	Indirect ^[38]	Direct active ^[39]	Thermosiphon active ^[35]	Indirect active ^[36]
Overall size (m ²)	2.95	3.17	2.59	2.18	1.97
Absorber size (m ²)	2.95	3.16	2.31	2.18	1.82
Maximum efficiency	0.67	0.56	0.78	0.84	0.71
Energy production (kW.h/day): - Insolation 3.2 kW.h/m ² /day (temperate) - e.g. Zurich, Switzerland	5.8	5.0	6.3	4.0	5.0
- Insolation 6.5 kW.h/m ² /day (tropical) - e.g. Phoenix, USA	10.9	9.4	12.2	10.9	9.4

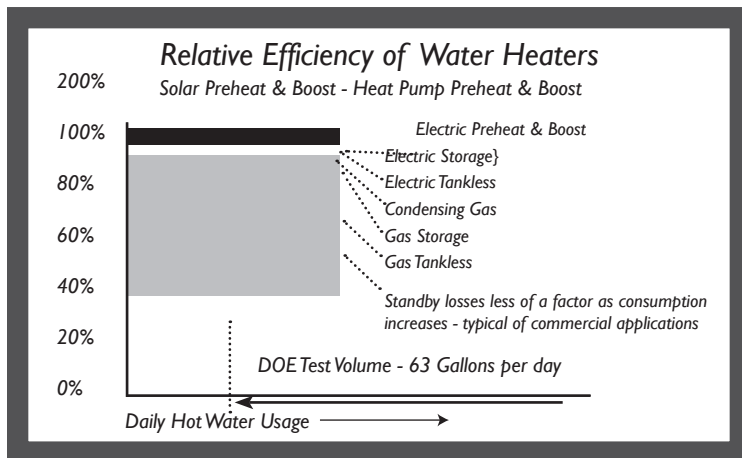
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GET COMPETITIVE WITH THE SOLAR EDGE

BUSINESSES are gaining a competitive edge, by decreasing their utility, water and sewage bills in the restaurant kitchen, the garage, the factory, the shop, the laundromat, the office and the apartment building. **SOLAR POWER** is a natural way to decrease the weight of the total energy bill that goes to heat water. The sunny skies of the San Francisco Bay area are perfect for solar thermal generated hot water. In all businesses, owners and tenants alike, demand safety, reliability and convenience from their hot water systems. Patented Transoptic Solar systems will give your workers and residents a comfortably hot shower, clean clothes, clean dishes and clean hands and then put money in your wallet every month, through reduced utility bills.

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3 A MONEY SAVING SYSTEM
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William Matthias

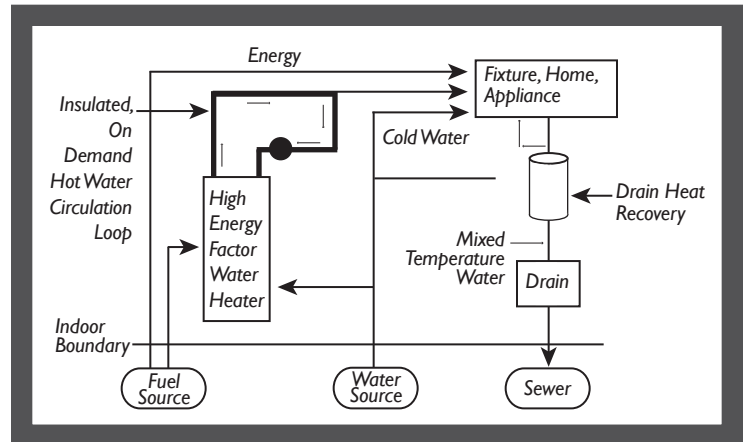
A typical solar-equipped hot water tank.

INSTALLATION AVAILABLE IN 48 STATES

www.transoptic.com • info@transoptic.com • Phone (650) 703-9733

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Improved "Simple" Hot Water System

Comparison of Solar Hot Water systems ^[18]

Characteristic	ICS (Batch)	Thermosyphon	Active direct	Active indirect	Drainback
Low profile-unobtrusive			X	X	X
Lightweight			X	X	X
Freeze tolerant				X	X
Low maintenance	X	X	X		
Simple: no ancillary control	X	X			
Space saving	X	X			

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