

### **How does it work?**

Water is circulated between the solar collector on the roof to heat your hot water cylinder (usually in the airing cupboard). Once installed, it's fully automatic and its performance can be monitored with the controller display.

The vacuum tube solar collector concentrates sun's energy to the manifold at the top of the collector. The controller continuously compares the temperature in the manifold against that in the hot water cylinder. When the water temperature in the manifold is hotter than the water in the cylinder, a pump circulates water through the manifold, down well insulated pipe-work and through a heat-exchange coil in your hot water cylinder (referred to as a solar cylinder or twin-coil cylinder). The mixture of water + antifreeze flowing around the solar system is used to heat the water in the cylinder indirectly. This means that no water in the Solar Heating system will come into contact with water in your hot water cylinder. The heat is transferred, not the water.

The slightly cooled water then returns back to the solar panel. As long as the water in the hot water cylinder is at the required temperature, your existing boiler will not switch on.

### **How effective are Contemporary Energy's panels?**

Our modern hi-tech panels work brilliantly in the UK climate. They work best in direct sunlight, but still work effectively on diffused solar radiation, and hence contribute well to water heating even on cloudy days. Our hi-tech evacuated tube panels are up to 40% more efficient than more traditional flat-panel solar water heaters and hence can provide more of a contribution to water heating outside of the peak summer season. This type of panel is even used by the British Antarctic Survey for solar water heating!

### **Can I install this myself?**

To perform a successful installation of a solar hot water system requires basic DIY, plumbing and to a lesser degree, electrical skills. Many competent DIY enthusiasts have successfully installed our kits following our detailed instructions. We are happy to offer advice during your installation.

### **Will the system freeze in winter?**

No, the manifold assembly is well insulated, and the solar heating circuit is filled with 40% antifreeze, specifically made for solar installations.

### **How long will the system last?**

System life is approximately 25 years. There are very few moving parts. The tubes are tested to withstand hail up to 25 mm in diameter. If individual tubes are damaged the system will continue to function normally but at a slightly reduced capacity until such time as the tubes can be replaced (a simple process).

### **Do I need planning permission?**

Usually no. From April 6 2008, homeowners have been able to install solar panels, without needing to get planning permission, as long as there is no impact on others. Solar panels attached to the building must not protrude more than 200 millimetres from the roof slope. The only exception is if your property is a listed building or is in a conservation area, in which case you will need to consult with your council planning department.

### **Will I still need my fossil fuel boiler?**

A solar system will provide typically between 50-70% of your hot water annually. This ranges from 95% in summer to 10-20% in winter. Your existing boiler will provide the rest. Solar systems can be used effectively with gas or oil boilers, Agas, Rayburns, solid fuel boilers, wood-burning stoves and many combi-boilers.

### **I have a swimming pool, will I benefit from this system?**

Swimming pools are a very good application for solar heating. Our collectors can be roof-mounted or pool-side. It is possible to design a system that will provide hot water for your home as well as your pool. Heating a pool using conventional fuels is an expensive business. Solar will make significant energy and cost savings and enable you to maximize the season.

**Contact us on  
01962 733352**



## **Invest in Solar Water Heating**

### **Do It Yourself kits for Solar Hot Water Systems**



Mid-winter with snow on the ground, and the solar water heating system working perfectly.

**info@contemporaryenergy.co.uk  
contemporaryenergy.co.uk**

# CONTEMPORARY ENERGY LTD

## Solar Thermal DIY Kits

**30 tube collector panel, pumpstation  
+ digital controller. Then choose your  
cylinder, if required.**

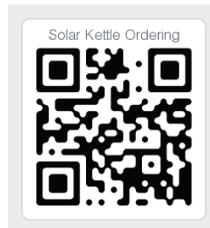
For maximum efficiency solar hot water systems,  
***Check our website for prices.***

All kits include panel, pumpstation, controller and, if required, we provide a suitable hot water cylinder. Standard cylinder is a 200l vented. For unvented or larger cylinders the price will be adjusted accordingly.



## Solar Kettle

If you haven't tried our amazing solar kettle, give it a try. It uses the same technology as our solar thermal panels, only on a smaller scale. So if you are curious about solar thermal, for only £35 you could buy a solar kettle and experiment for yourself!



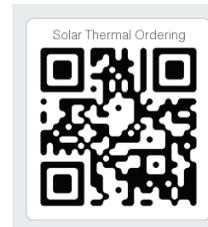
[solarkettle.co.uk](http://solarkettle.co.uk)

**We give full back up and technical support.**

**Visit our website for more information on  
specifications and prices.**

### Applications

- Domestic hot water
- Swimming pools
- Under floor heating



[contemporaryenergy.co.uk](http://contemporaryenergy.co.uk)



When you install solar water heating in your home, you will reduce your impact on the environment. The system will pay for itself whilst reducing your fuel bills, and will also add value to your property. Contemporary Energy Ltd supply and install state-of-the-art solar water heating systems for domestic, industrial and swimming pool applications. A typical domestic solar hot water system will (over one year) supply ~70% of a household's hot water. Between May-September 95-100% of the hot water required can usually be supplied by the solar system.

**Cost-effectiveness** is our goal. With our rock-bottom prices, some systems can pay for themselves in 3 years! We act as importer and wholesaler. We import our systems by the container-load, direct from the manufacturer, to keep our prices low.

**Check our website  
for kit details**

[contemporaryenergy.co.uk](http://contemporaryenergy.co.uk)