/

Home Energy Check-up Information Sheet

Issue Number 8 Revised	Subject / Source **SOLAR HEATING AND ELECTRICAL GENERATION SYSTEMS**	Date 08.2020

Solar energy systems can provide hot water and generate electricity, and are strongly recommended as a way of reducing the carbon footprint of your home.

They are, however, a big investment, and it is important to evaluate the options carefully. A number of companies circulate advertisements for these products from time to time, and invite people to request an appointment.

Before responding to such an invitation by contacting a particular company, we strongly recommend that you seek information about the range and price of products available from the internet. and other local suppliers of which there are a number. We would also recommend you ask several firms to provide you with information, or send their rep to see you **and make it clear to them all** you are having several quotes to compare and will not make an on the spot decision. Useful background information can be found from The Energy Saving Trust.

If you ask for an appointment before you have done this, you may find that you are put under pressure to make a decision before you have an opportunity to compare the product on offer with others. Some firms may offer you a “special price” if you sign a binding agreement immediately, and may refuse to allow you to wait until the next day. If you question the legality of such sales methods, they may reply that you are not covered by the legislation on “cold calling” because you invited the firm’s representatives to visit you.

The product you are being offered may be very good. But you will be in a much stronger position to decide, and to negotiate terms if you have researched the nature and cost of alternatives before you respond to the advertisement by requesting an appointment.
Also be aware that there are a number of different systems, and some may not be very compatible with your heating system in spite of what some reps may say. If you have a combination boiler, ask the rep. how they overcome the problem of it possibly not liking preheated water. Also ask a) what type of pipe work they use (some use plastic pipe and

[

push fit joints which does not always cope well with high temperatures, b) can they use your existing hot water tank? – In some circumstances a Willis Siphon can be installed where space is a problem with installing larger tanks, c) how large a tank do they recommend? d) will they provide a display to tell you the temperature of the solar hot water, e) what is the maximum temperature the solar tank will rise to – it can be limited, f) consider carefully if a solar powered pump in the collector is really such a good idea in winter when there is often sufficient solar gain to increase water temperatures but insufficient to run the pump!

Solar hot water, costing around £4000 can save you up to £50% on your annual hot water bill and some 325Kg of carbon foot print per year. 3 Kwh Photo voltaic systems currently cost below £6,000, can halve electricity bills and approx. save 1.2 tonnes of carbon. Surplus electricity can be sold and exported into the national grid, and energy companies will pay a small amount for electricity generated.

Savings and output from wind turbines vary depending on location and size BUT they are only effective where there is minimum turbulence. Vertically mounted turbines are generally quieter then convention horizontally mounted ones. There are also issues re planning permission so check with your local authority.

With low interest rates on savings, renewable technology could be a good investment. Renewable technology may also increase the value of your property as it will become more energy efficient.

[