

# SOLAR UPSKILL

## #17: SELLING THE RIGHT SOLAR SYSTEM

Selling the advantages of the system and, in particular, informing the customer what they can expect from a solar water heating system and selecting the right system for a particular client are key to the success of an SWH installation, says our solar expert Ian Sumner, technical director of Energy Conscious Design and EcoSolar.

If the system and its benefits are over-inflated by the person selling the system to the customer, then the customer will have unrealistic expectations and is unlikely to be satisfied with the installation.

Solar Upskill #17 shows that a correctly designed, installed and maintained solar water heating system will provide effective savings on the energy consumption of a household by around 70 percent of the electricity consumed for water heating. According to Ian, two of the most commonly overstated efficiency levels are: '97 percent efficiency' – this level is only for the absorber within the collector; and '70 percent efficiency' – this level is often the peak collector efficiency and certainly will not be delivered and maintained in practice.

Type, size and system operation and control are the three elements that need to be considered when selecting the right type of system for a customer. Different types of systems are detailed in Solar Upskill #17 and their application in different settings, along with Energy Conscious Design's advice on the basics of system sizing. System operation and control is covered, as is the necessity for an adequately managed back up heating system.

Ian's latest Solar Upskill follows his look at solar water heating for swimming pools (#16), published in the last *Plumbers' Journal*.



*This is an abridged version of part 17 of Ian Sumner's Solar Upskill series, which is available for download in full from the Sustainability (formerly the Energy Efficiency) Interest Group at [www.masterplumbers.org.nz](http://www.masterplumbers.org.nz).*

Energy Conscious Design and EcoSolar have been working on a series of training sessions, suitable for specifiers, designers and installers. Contact Energy Conscious Design for dates and seminar locations or more information. Email [ian@ecosolar.co.nz](mailto:ian@ecosolar.co.nz). Phone 0800 ECOSOLAR (0800 326 76527) ■

## JD'S GAS CORNER: ID CARDS FOR GASFITTERS

Starting this issue is a series of thought-provoking ideas for the gas industry from UK-trained gasfitter / gas engineer John Dyer.

"Why not introduce an ID card for gasfitters into New Zealand?" John asks.

This could include:

1. Photo identification
2. Company working for
3. Braille for the blind
4. Competencies (on back of card), such as plumbing, gasfitting, drainlaying, gas engineer, gas servicing, basic electrics, solar technician and so on.
5. Affiliations to companies.

Got a response? Contact: John Dyer, phone 07 377 4141, email [clairedyer1@googlemail.com](mailto:clairedyer1@googlemail.com). ■

## Capture the sun today...



## ...with EcoSolar SOLAR SYSTEMS

Join us in delivering a quality cost-effective SOLAR HOT WATER SYSTEM to the New Zealand market.

Energy Conscious Design was set up by professional engineers to develop THE cost effective solar hot water heating kitset for New Zealanders. We require agents and installers in all areas of New Zealand and the Pacific to help meet customer demand.

**We offer:**

- Quality European product with 5 year warranty
- Training and back-up from an experienced and qualified engineer
- True value for customers

**Our product:**

- 2.3m<sup>2</sup> collectors from \$585
- Kitset incl 2.3m<sup>2</sup> collector, controller and pump from \$1,060
- Flat plate collectors have copper absorber plate and riser tubes for greater efficiency. These have evolved over nearly 25 years of collector manufacturing.



To find out more about our products and being at the forefront of solar hot water heating in New Zealand contact:

P: 09 416 6997 F: 09 416 8997

[www.ecosolar.co.nz](http://www.ecosolar.co.nz)

E: [info@ecosolar.co.nz](mailto:info@ecosolar.co.nz) A: PO Box 81049 Whenuapai, Auckland, New Zealand



Energy Conscious Design

Engineering excellence that won't cost the earth