

Sustainable Wellington Net Editorial - 18 Oct 1999

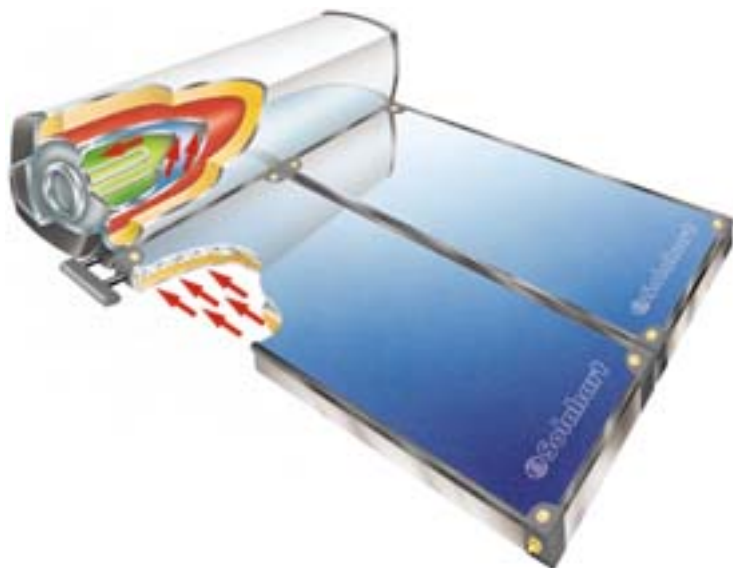
Showering in Liquid Sunshine

Tom Robinson recently installed a solar heated hot water system and writes about his experience in this editorial

The Government's Energy Efficiency and Conservation Authority (EECA), Greenpeace, Prometheus, and Synergex recently produced an offer of an interest free loan on purchasing and installing a Solahart solar hot water system

I read about this through Greenpeace's Solar Pioneers newsletter. It was advertised as \$5,400 for an existing home, with \$4,000 of this being an interest free loan

We decided to upgrade from the advertised K series model 302 to the Black Chrome XII (BCXII) series, model 302. The BCXII comes with a 12 year guarantee versus 5 and is generally more robust. As we plan to stay in our house Mander Plumbing recommended this option - although they also said there was nothing wrong with the K series - they've been installing them for 12 years (lots in Wellington) with no problems. Given this recommendation and my penchant for buying the best, we went for the BCXII



Note the "302" numbering scheme is 300 for the tank capacity in litres, plus 2 for the number of solar collectors. Both models are passive

We also bought a Solar Monitor. This is a simple readout of the tank's water temperature with an on/off switch. Usually the backup electric heating cuts in automatically. With the Solar Monitor we can examine the existing temperature, look at the weather, and decide if we need to boost the heating. We can also adjust our hot water use to match what's available

After these upgrades the total price was \$9,152 (incl), which broke down to:

302K materials and labour	6,651
Upgrade to BCXII	837
Tempering valve (to ensure water from the tap never exceeds 60°)	149
Electrical work	376
Solar Monitor	100
GST	1,014
Prometheus Savings Account (explanation below)	25
Total	\$9,152

There was a \$25 deposit required into a Prometheus Savings Account which must remain invested for the term of the loan. This attracts a 1% interest rate - not a great return, but Prometheus invest the money ethically: They work with a range of initiatives and are especially active in Education and Art, Healthcare, Sustainable Agriculture, and the Environment. With agriculture they strongly oppose GE farming and will only lend to organic and bio-dynamic farmers and growers. If you have some spare money and can live with a low return rate (currently Prometheus offer 1 - 3.75%) in exchange for knowing you're supporting this planet's future, check out our [Ethical Investment page](#)

The installation took just under 2 days and we never went without hot water (although this isn't always the case). Prior to the installation I needed to carry out some roofing work to remove an old skylight which would be covered by the solar panels. Sometimes strengthening work on the roof is also required, as there's a 300 litre water tank up there!

Post installation we also had to carry out some work on the shower and replace the washers in our hot taps - they couldn't cope with the change from low pressure to mains pressure

The system is advertised as heating 65 - 70% of your hot water from the sun, and heating 300 litres of water to 60° on a sunny day. The electric booster is promoted as supplying hot water within an hour or 2

We only have a single electric meter so can't separately measure our hot water use, but assuming hot water accounts for 50% of our electricity bill, worst case of solar heating of only 65% of our hot water, and no electricity rises, we're looking at a 30 year pay back period. Of course the existing cylinder was quite old, and there's peace of mind from knowing we're helping stop Greenhouse Gas emissions and the need to dam further rivers

For the 4 weeks of spring it's been installed our family of 2.5 has only needed to use the electric booster about 3 hours a week - so our actual savings will be a lot higher. It's lovely taking a long shower and knowing both monetarily and environmentally it's free hot water!

Synergex have described themselves as being overrun with this offer, and they already have over 6,000 installations in New Zealand. If you're like me and wanting to do something proactive to help the environment I recommend investigating solar hot water heating... It can save you money too (albeit long term!)

Further Information

- Manufacturer: [Solahart Industries Pty Ltd](#)
- Distributor: Nick Schofield, [Synergex Systems NZ Limited \(E-mail\)](#), phone 0800 769 377
- Installation: Gavin Chambers, Mander Plumbing Ltd, phone 478 7226
- [Greenpeace Solar Pioneers \(E-mail\)](#)
- Happy customer: [Tom Robinson \(E-mail\)](#)

Picture © and used by kind permission of Solahart Industries Pty Ltd.

UNLESS.

Unless someone like you cares a whole awful lot, nothing is going to get better. It's not -- Dr Seuss, *The Lorax*

