

When green talk leads to action

Talking green is cheap but actually going green can also lead to savings.
SANDRA LANGDON gets some tips from those who know how.



Left: Gail Davidson and Minnie Nancarrow with the innovative Waterwall.

ST KILDA residents Marnie Foulis and Colin Lane searched "high and low" for a water-efficient way to keep their newly established garden alive.

"We were looking at ways we could limp our garden through summer with such drastic restrictions," Foulis says. "You spend all this money on buying plants and all this time and effort, and then if you can't water it, what is the point?"

At the start of summer, they purchased a system that delivers greywater from the washing machine directly to the roots of plants in the garden. The Evergreen 230, pioneered by Melbourne's Waterwise Systems, has accounted for more than 50 per cent of the State Government's \$500 greywater rebates and was a finalist in the savewater awards.

Their garden benefits from up to 10 loads of washing each week. Only once, after a run of 40-degree days, did Foulis need to water manually. Lane (of comedy duo Lano & Woodley) estimates that the family will save \$300-400 in annual water costs.

Foulis and Lane are looking at other ways to make their Federation house more sustainable. The possibilities include a rainwater tank and greywater system for toilet flushing, and passive solar design techniques such as a thermal mass of polished concrete and positioning the windows and eaves to capture the winter sun.

However, established houses and apartment blocks will continue to waste precious water and energy. The average Victorian home has an energy rating of only 2.2 stars. Older houses with no insulation rate even lower.

Environment Victoria spokesman Darren Gladman says the 5 Star standard should be extended to cover major renovations. In addition, he'd like to see a system of mandatory disclosure on energy efficiency for the sale or leasing of established homes. He believes low-income earners may opt for higher rent if it meant living in efficient homes with low bills.

scheme to inform home-buyers and tenants of the energy performance of established homes.

SEAV spokeswoman Megan Wheatley says a similar scheme exists in the ACT and, as well as the environmental benefits, there's evidence that houses with good ratings "have been able to sell for a higher price".

Luke Middleton, design director of Ecologically Motivated Environments (EME Group) in Middle Park, encourages clients to think of a water tank as a "value-add" to their home. His company sources tanks for the urban environment because "not everyone wants to have a big tank when you have paid a lot for real estate". He considers the available space, cost and overall design of a home, and may conceal the tank or make it a feature.

"A water tank can be easily integrated into a home whether it's existing or new without making the occupants feel like they're country bumpkins or hippies," he says.

EME Group won a Smart Water Fund grant to research water tanks and the water usage patterns of different household types, and to demonstrate water-recycling techniques at five homes. These measures have reduced water consumption at a Prahran house by 70 per cent - to less than 100 litres per person a day.

"By spending a modest amount of money ... we can all, in a way, create and control our own personal reservoirs," Middleton says.

The Port Phillip EcoCentre, which opened last year in the St Kilda Botanical Gardens, is a great example of how to make an established house more sustainable. Experts and volunteers transformed the former curator's house, which had poor design and orientation, into a model of urban sustainability - raising its energy rating from 1 to 5 stars.

The measures include solar electricity, solar hot water, a 22,000 litre underground rainwater tank, greywater/blackwater treatment in a worm farm composting system, sustainably sourced materials, energy-efficient appliances and passive solar design.

However, you don't need to go to these lengths to make a difference. According to Environment Victoria, the average home wastes up to \$570 a year on power bills. To cut costs, it suggests weather-stripping around the windows (save \$65), insulation in the roof (save \$150) and compact fluorescent lights (save \$60).

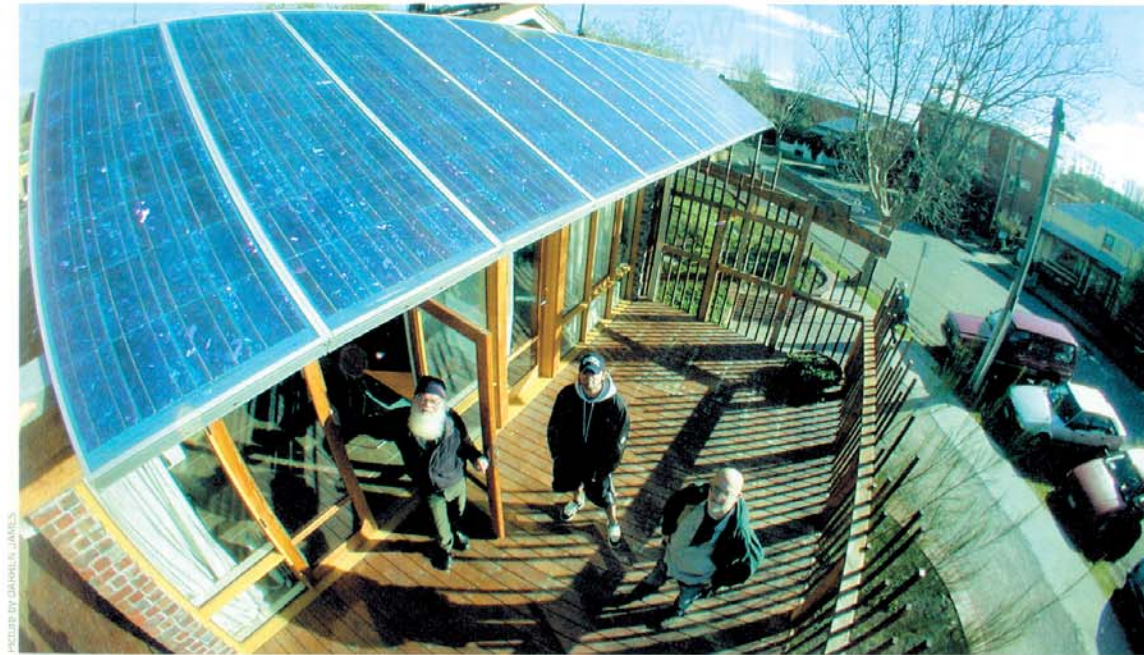
Tenants might also consider purchasing green power - electricity from solar, wind and hydropower sources - or attending one of Port Phillip Council's Sustainable Living at Home "SLAHminars". Upcoming workshops include Detox Your Garden (August 18), Water Conservation Gardening (September 15), and Home Energy Assessment (October 20).

Albert Park resident Stephen Ingrouille, who was a finalist in the Prime Minister's Environmentalist of the Year awards, runs the city-based business Going Solar. Ingrouille encourages the use of solar hot water systems rather than the more expensive photovoltaic (solar electric panel) systems.

"Solar hot water is probably the single best thing that anyone can do," he says. "The typical hot water system will reduce gas consumption by about 70 per cent."

Currently 8800 Victorian households (including 3500 in Melbourne) have solar hot water. Each year about 135,000 households replace their hot-water service, yet less than 1 per cent choose solar. The systems retail at about \$3000 and a rebate of \$1500 is available for established houses.

This year, the State Government is installing solar systems on the roofs of public-housing towers in areas including South Melbourne and St



Neil Blake, Roy Vukelic and Geoff Barry enjoy the (energy-producing) sun at the Port Phillip EcoCentre.



Colin Lane, Marnie Foulis, son Finbar and friends.

Kilda. The systems will act as a booster to the existing hot water system in each flat.

Ingrouille believes it's a concept that bodies corporate around Melbourne could adopt. They might also consider rainwater tanks, says Middleton, of the EME Group. Tanks could be installed in common garden or car park areas. "People would be surprised at how little space they take up," he says.

Nor much space at all, if you own a Waterwall. Mitch O'Sullivan and Gail Davidson developed the slim-line rainwater tank that doubles as a fence and are now distributing Waterwall from their

Yarraville factory to Bunnings hardware stores. They appeared on the ABC's The New Inventors show recently, and won their episode.

"People love the idea of a tank that doesn't look like a tank," Davidson says.

Waterwall is a modular system with each 1200-litre tank measuring 2.4-metres long, 1.8-metres high and only 33-centimetres wide. As well as providing water for the garden and toilet flushing, the large surface area and slimmess of the tank provides thermal mass possibilities - the sun could preheat water before it enters the hot water service.

For Lane and Foulis, running their greywater system has opened their eyes to how much water our homes waste. "Your social conscience creeps in," Lane says. "Everybody is telling you to be waterwise and all that water is just going down the drain."

Having a water-saving device is "good for the soul". "We have to embrace this as a way of life from now on," Foulis says. "It's not just a passing phase."

Middleton finds these sentiments heartening. "Once people become proud of being self-sufficient then I think it will just be a snowball effect," he says.

For details of the rebates available for solar and water-saving devices, go to www.ourwater.vic.gov.au/ourwater/rebates.htm or to www.sustainable-energy.vic.gov.au



Neil Blake monitors the EcoCentre's worm farm composting system.



Solar panels for public-housing towers.



Under the lawn of this Middle Park home, Luke Middleton has concealed a 10,000-litre rainwater tank.