



## Big boost for solar rebates in South Australia

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*This is a guest post from [Kiashu](#).*

From [Auntie](#) we learn that in South Australia, soon householders with photovoltaic setups will be able to sell their power to the grid at double the retail rate. I had a look at some figures and saw that as they said, it's not going to be a money-making scheme for the average household, who would have to be energy-conservers to break even, though in principle it could be an investment with a small return for community organisations, since they have buildings with a large roof area which aren't used much - we'd have to look at figures for larger (20+kW) systems to be sure.

South Australia will become the first state to pay a premium to people who install solar panels which can return power to the electricity grid. From July, electricity generated by solar panels will be worth twice that bought from power retailers. Legislation passed by State Parliament last night extends the scheme to small businesses, churches and community groups.

South Australian Greens MP Mark Parnell says his amendment was accepted by the Government to make it a 20-year scheme instead of five. "This new bill isn't going to make solar panels a money-making scheme for people; what it does is it softens some of the expense," he said. "We already have the commonwealth rebates which are a good incentive, now we've got this extra state rebate and thanks to the Greens amendment we've now got a scheme that is guaranteed to last 20 years."

The legislation has been passed just ahead of Adelaide hosting an international solar cities congress next week.

Looking at some grid-feed PV systems available in Australia here, for example from [AussieSolar](#) (no endorsement implied, they were just the first to pop up in a google) - we can do some calculations.

For electricity supply, here in Victoria there's an account charge which you have whatever power you use, don't use, or produce, and a per-kWh charge. It doesn't vary much across Australia, and for my company it's A\$40.04 quarterly, A\$160.16 annually, and the power is charged at A\$0.16962/kWh.

They say they'll buy the home-generated power at twice the rate, so that's A\$0.33924/kWh. So you need your home system to export 472kWh annually, or 1.3kWh daily, just to cover the service charge. Anything after that can go to making up for the cost of the PV system.

The average Aussie household uses 14kWh of electricity daily, so AussieSolar's 3kW package should do it for them, that's A\$32,000 before public rebates and A\$21,760 after, and will produce 14-16kWh/day - call it 15, and then we see that the export will basically cover the service charge - you use 14, and turn off a few appliances when not in use to save another 0.3kWh/day, letting you sell 1.3kWh/day. The system will last you about 20 years before needing replacement, so your ongoing power bill is nothing, just that A\$21,760 over 20 years, which is A\$272 a quarter. Had you just bought 13.7kWh/day from the power company directly, it'd cost you A\$251 a quarter. So the net cost to you over the 20 years is about the same as just buying the power directly.

Of course if you conserve energy, then the net cost of your power and PV system could be nothing. You can without drama get your power consumption down to 6kWh/day in the average Aussie household, that leaves you 9kWh/day to sell out. So you have the A\$272/q cost of the PV, but earn a net A\$237.80/q from power sales. You're thus only paying A\$34/q for your power, which if you'd bought it straight from the grid would have cost you A\$133.

A community hall or organisation could install the largest 5kW system at \$38,290 with rebates, getting 24kWh/day; most don't use more than 5kWh/day (since it's not occupied all the time like a house is), leaving 19 to sell. So they'd earn A\$547/q, rather than paying A\$117/q. This is an effective 1% return on their investment.

Another point is that currently solar energy, if you buy it from a retailer through the grid, will cost you another A\$0.061/kWh. So that in each of the three cases above, having your own photovoltaic system is cheaper over the 20 years than buying photovoltaic power from the grid. Now there's a DIY project for you, I wonder if they'll cover it on *Barry's Better Backyards*.

The other considerations are what else you could have done with that A\$21,760, like stuck it in the bank for a few percent interest, and that in buying PV today and selling the power to the grid you're insuring against future power price increases, which are likely as fossil fuel depletes and greenhouse mitigation schemes come in.

On the whole it seems a more worthwhile spending of tens of thousands of dollars than an SUV or new decking for the back veranda, but as they said, it's not going to make you money. I think that like the current state and federal rebates, it won't be taken up much, simply because it's a long-term investment tied to a particular building, and the proportion of people owning their own homes is declining here Down Under; those who do own them often have heavy mortgages, so fear losing the home in the next few years.

Nonetheless, it's an interesting scheme.



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