

Lifecycle cost of Solar Hot Water (financed by loan) vs. Electric Hot Water (bought with cash) in Alice Springs

	Solar hot water	Electric hot water
Capital cost	\$3,400	\$750
Less any rebates (PowerWater)	\$1,050	\$0
Annual running cost	\$15	\$325
Scheduled maintenance (every 5 yrs)	\$250	
Unscheduled maintenance (3 over 15 yrs)	\$150	\$130
Life expectancy	15yrs	15yrs
Cash paid upfront	\$0	\$750
Loan amount (incl \$50 fee)	\$2,400	\$0
Interest rate	11.95%	
Length of loan	4yrs	
Monthly loan repayments		\$63
Savings over 15 years		\$1,839

Observations

A standard 30L, 2 panel solar hot water (SHW) system has higher total costs for the first 7-8 years after purchase, but then saves around \$2,000 in the last 7-8 years (almost the cost of a replacement SHW system).

The Centre for Sustainable Arid Towns therefore believes that with financing and rebates (see below) SHW systems are very cost effective for Alice Springs residents over the medium to long term.

We have also developed an Excel program that will assist you to calculate the lifecycle cost of an electric versus a solar hot water system for your specific requirements. Go to www.alec.org.au and follow the links to CSAT.

Solar Hot Water systems add value to your home

In NSW, the BASIX house rating scheme gives credit points for SHW systems and in the ACT, extra BASIX star ratings increase the value of a house. Therefore, the extra credits gained by a SHW in NSW are likely to add resale value to the house. If homeowners sell their house prior to 7-8 years, they can be relatively confident that the SHW system will always be more cost-effective than an electric system, given that the various scenarios show SHW systems are rarely more than \$1,000 above electric systems in the first 7-8 years.

Year	Cost for solar hot water system					Cost for electric hot water system				
	SHW TOTAL	Upfront capital	Running cost	Maintenace	Loan repaymt	ELEC TOTAL	Upfront capital	Running cost	Maintenace	Loan repaymt
0	\$0	\$0			\$0	\$750	\$750			\$0
1	\$765		\$15		\$750	\$1,075		\$325		
2	\$1,530		\$15		\$750	\$1,400		\$325		
3	\$2,296		\$15		\$750	\$1,725		\$325		
4	\$3,061		\$15		\$750	\$2,050		\$325		
5	\$3,326		\$15	\$250	\$0	\$2,375		\$325		
6	\$3,341		\$15		\$0	\$2,700		\$325		
7	\$3,356		\$15		\$0	\$3,155		\$325	\$130	
8	\$3,521		\$15	\$150	\$0	\$3,480		\$325		
9	\$3,536		\$15		\$0	\$3,805		\$325		
10	\$3,801		\$15	\$250	\$0	\$4,260		\$325	\$130	
11	\$3,816		\$15		\$0	\$4,585		\$325		
12	\$3,981		\$15	\$150	\$0	\$4,910		\$325		
13	\$3,996		\$15		\$0	\$5,365		\$325	\$130	
14	\$4,161		\$15	\$150	\$0	\$5,690		\$325		
15	\$4,176		\$15		\$0	\$6,015		\$325		
TOTAL	\$4,176	\$0	\$225	\$950	\$3,001	\$6,015	\$750	\$4,875	\$390	\$0

Financing for Solar Hot Water Systems

Power Water NT provides a rebate for SHW systems. A standard 2 panel, 30L Solahart 302J system attracts a rebate of \$1,044 (as of 24/1/06). See www.powerwater.com.au for more details.

Solahart offers a one year loan scheme called "Smart Pay" for the purchase of their SHW systems, which is available only through authorised dealers. See www.solahart.com.au for more details.

The Bendigo Bank provide 'Green loans' for solar hot water systems with a 1% discount off the annual interest rate. You can call 1300 366 666 or see www.bendigobank.com.au to find out more.

