



 **Hills Solar**



*hills. proudly  
australian owned*



**Hills**  
a part of  
everyday  
australia

Since the introduction of the iconic Hills Hoist in 1946, Hills Industries have been developing a range of innovative products that are now a part of everyday life in Australian households.

Today, Hills are well known for manufacturing a wide range of quality home, hardware and eco products including Team Poly rainwater tanks, Bailey ladders, Hills garden sprayers, aluminium doors, garden beds, ironing boards and a wide range of clotheslines.

With more than 2,800 employees in Australia and New Zealand, you can be sure that Hills will continue to play a big part in the lives of Australians for generations to come.



**Hills Solar**  
established  
in 2006

Hills Solar has developed one of the most advanced solar hot water systems available in Australia.

Hills Solar hot water systems will enable consumers to harness the power of the sun, generating affordable hot water for the home.

The energy savings achieved from installing a Hills Solar hot water system will assist in the preservation of the Australian environment, for the enjoyment of future generations.





bathe in  
sunshine

# the solar solution

In the search for more cost effective and environmentally sustainable energy sources, solar hot water provides the perfect solution.

Up to 31 percent of most Australian households' electricity use is for heating hot water.

By installing a solar hot water system, households can reduce their annual hot water heating costs by up to 90%.

**“Households can reduce their annual hot water heating costs by up to 90%”\***

In addition to the economic advantages, solar hot water systems provide significant environmental benefits with reduced energy use translating to a reduction in greenhouse gas emissions.

The ability to save money and save the environment makes solar heated hot water the right choice for your family and the environment.

**“Reduce household CO<sub>2</sub> emissions by up to 4 tonnes per year”\***

\*Based on TRNSYS modelling

## > COMPARATIVE COSTS

(Source: Sustainability Victoria)

Hot water systems	Monthly cost <sup>^</sup>
Day rate (instantaneous) electric	\$64 - \$90
Off-peak electric storage	\$34 - \$56
<b>Solar hot water (electric boosted)</b>	<b>\$14 - \$18</b>

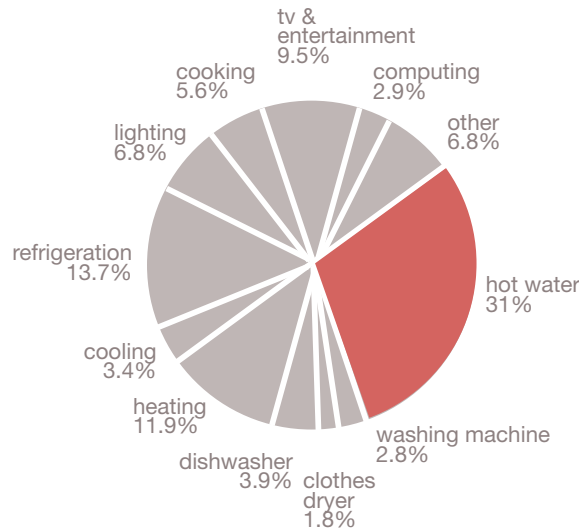
<sup>^</sup>Monthly costs assume a water usage of 180-260 litres/day.

The appliance running costs listed are based on the average electricity tariff. Average Peak rate (GD or GR) 17 cents/kWh. Average Off-Peak 9 cents/kWh.

These costs do not include supply charges, which can add up to \$50 to each quarterly bill. All costs are GST inclusive.

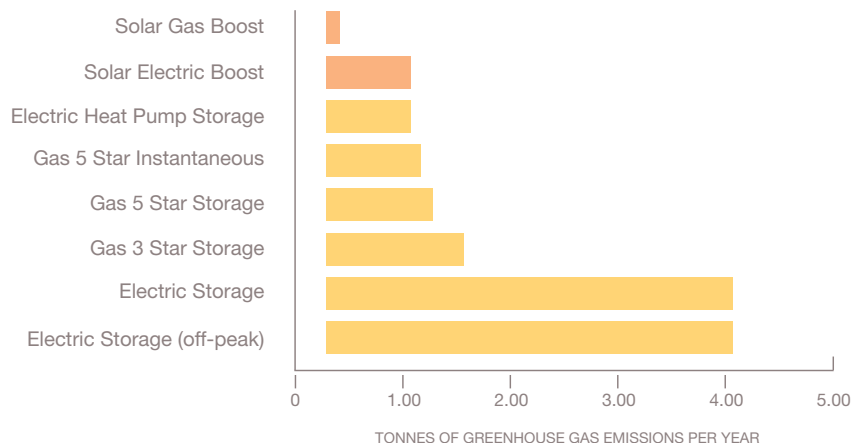
## > HOUSEHOLD ELECTRICITY USE

(Source: DECCW 2009. Based on electricity use of a 3 person household in Western Sydney)



## > TONNES OF GREENHOUSE GAS EMISSIONS PER YEAR

(Source: Sustainability Advice. Energy Strategies 2007. Based on Brisbane location, household of 3-4 people)



# leading the way

Hills Solar have developed a range of solar hot water systems that use advanced evacuated glass tube technology to capture the sun's thermal energy.

The result is a solar hot water system that delivers an improved energy efficiency of up to 90%. This effectively reduces households CO<sub>2</sub> emissions by up to 4 tonnes per year, the equivalent of taking a small car off the road.

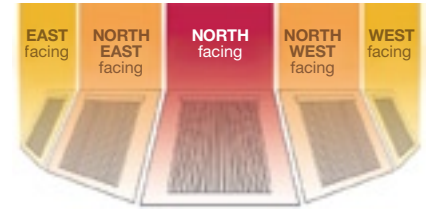
The Hills Solar hot water systems are not only designed to provide superior performance but will also look great and add value to your home.

# next generation solar hot water system

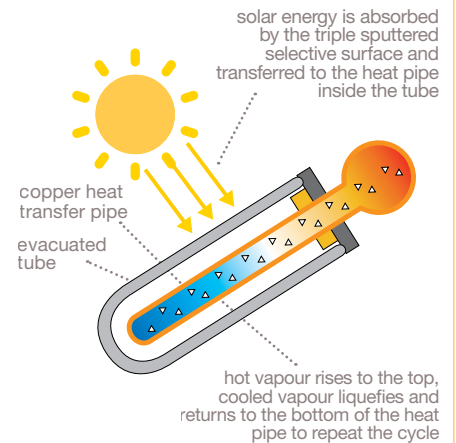
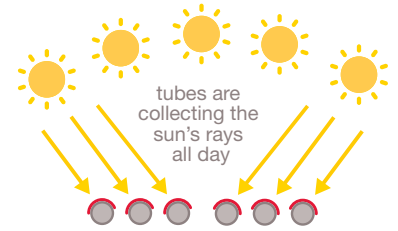
The Hills ESTEEM™II and the Hills EXCEED™ represent the pinnacle of solar hot water systems in Australia today.

Utilising advanced technology, the Hills ESTEEM™II and Hills EXCEED™ collectors deliver performance efficiencies well beyond those of traditional flat panel and other evacuated tube collectors.

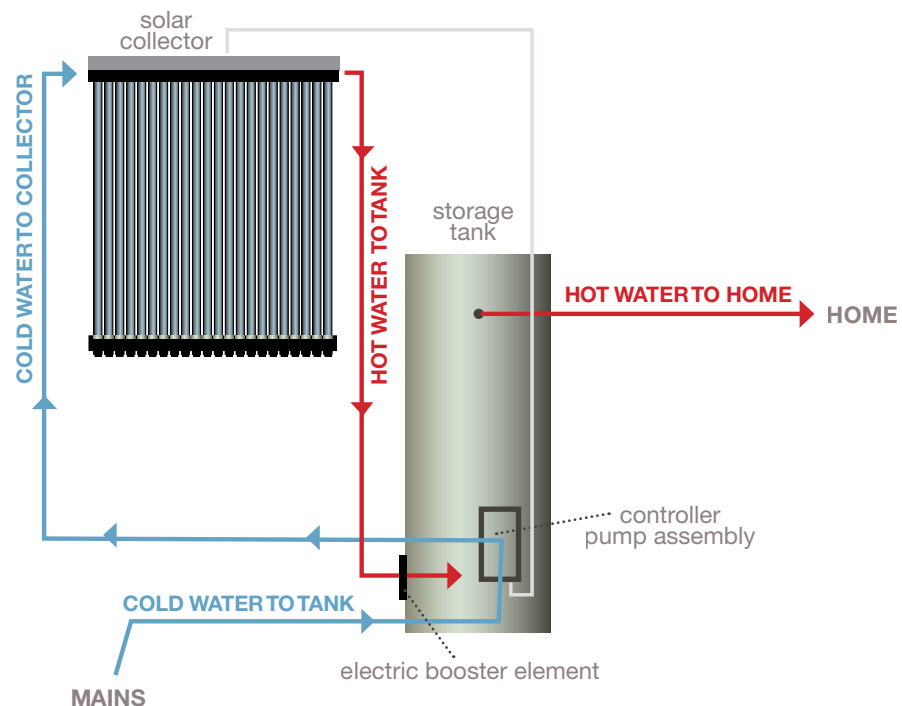
With superior design and enhanced insulating properties, the collectors optimise energy capture while minimising heat loss, providing greater energy efficiencies, particularly during the winter period when thermal energy is at its lowest.



> THE IDEAL LOCATION FOR COLLECTORS IS FACING DUE NORTH. However, 45° NW or NE is acceptable with minimal effect due to the cylindrical design of the evacuated tube.



## > HOW IT WORKS



# introducing Hills Solar hot water systems

Hills Solar sets the benchmark for efficiency, looks and reliability in solar hot water systems, coupling evacuated tube technology with superior storage tank construction.

Hills Solar hot water systems are designed with Australia's extreme climate in mind, offering frost resistance to  $-15^{\circ}\text{C}$ .

## “Frost resistant to $-15^{\circ}\text{C}$ ”

Easier and quicker to install than comparative products on the market, Hills Solar hot water systems position the storage tank at ground level, with only the collectors visible on the roof. The result is a much more attractive roof aesthetic without the need for any costly, weight bearing reinforcements.

At ground level, water is circulated from the storage tank to the collectors via the circulating pump. Once heated in the manifold, the hot water is returned to the tank while cool water is again circulated to the manifold to be heated, ensuring a constant supply of hot water.

## Hills ESTEEM™II

The Hills ESTEEM™II combines evacuated tubes with a stainless steel storage tank. The result is a solar hot water system that delivers exceptional heating efficiency and outstanding durability.

The Hills Solar stainless steel storage tank is not only lighter and tougher than equivalent mild steel tanks, it's also recyclable and exceeds the Australian Minimum Energy Performance Standards heat loss requirements.

Hills ESTEEM™II comes with a generous **10 year warranty** on the stainless steel storage tank and major components.\*

## Hills EXCEED™

The Hills EXCEED™ pairs evacuated tubes with a vitreous enamel (glass) lined storage tank, suitable for a wider range of water conditions in Australia.

Hills EXCEED™ comes with a **5 year tank warranty** and a **10 year warranty** on major components.\*

\*Conditions apply

## gas and electric boosting

When radiant energy is low as a result of cloud cover or rain, the Hills ESTEEM™<sub>TMII</sub> and Hills EXCEED™ utilise gas or electric boosting to ensure you'll always have hot water.

Hills ESTEEM™<sub>TMII</sub> and Hills EXCEED™ gas boosted solar hot water systems use continuous flow gas boosters, delivering up to 20 or 26 litres of hot water per minute.

Hills ESTEEM™<sub>TMII</sub> and Hills EXCEED™ electric boosted solar hot water systems ensure the water is maintained at 60°C. The system comes with a standard 3.6kW bottom-heating element however, this can be changed to a 2.4kW or 4.8kW element if required. Clever positioning of the element at the bottom of the tank ensures you'll have a full tank of hot water available all year round.

## “Hot water available all year round”

Some states offer a lower tariff on electric boosted hot water heating.

## renewable energy certificates (RECs)

RECs are a form of currency created by the Federal Government under the *Renewable Energy (Electricity) Act 2000* and are used to demonstrate compliance with the requirements of the Government's Renewable Energy Target (RET) scheme. There are 4 zones within Australia which will determine the amount of RECs per system.

In addition, some State Governments and local councils also offer generous incentives on the Hills ESTEEM™<sub>TMII</sub> and Hills EXCEED™ solar hot water systems.

## “The Hills ESTEEM™<sub>TMII</sub> and Hills EXCEED™ solar hot water systems qualify for generous Government incentives”\*

Hills Solar evacuated tubes have passed the AS/NZS 2712: 2007 Standards for both hail and frost resistance.

caring  
for your  
environment

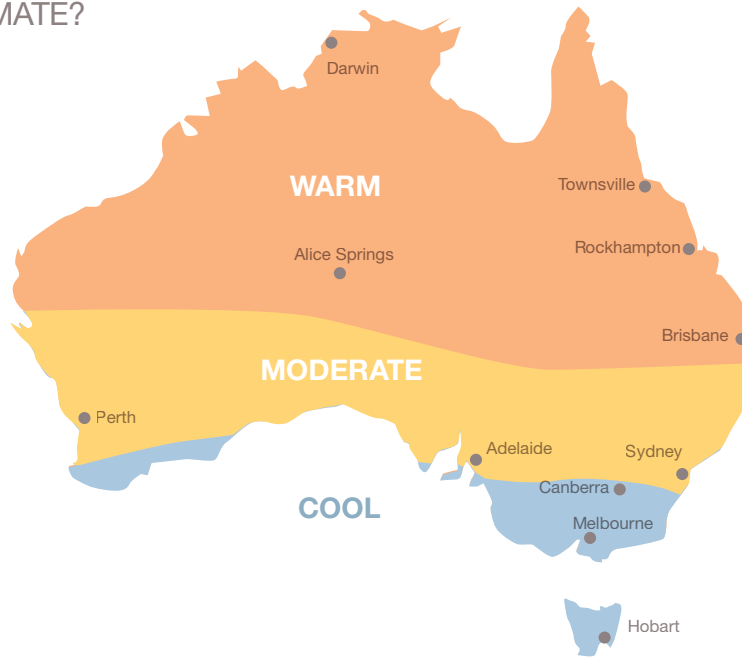
\*Conditions apply

# selection guide

No. of Persons in a Household	*Tank Size	WARM Climate *Collector Size	MODERATE Climate *Collector Size	COOL Climate *Collector Size
1-2 People	180 Litre Storage Tank	10 Tube Collector	10 Tube Collector	10 Tube Collector
3-5 People	265 Litre Storage Tank	22 Tube Collector	22 Tube Collector	30 Tube Collector
5-7 People	330 Litre Storage Tank	22 Tube Collector	22 Tube Collector	30 Tube Collector

Based on AS3500.4:2003 Appendix H. Assuming 80% container draw off. Energy calculations are based on AS4234-1994. \* Suggested only.  
> Tank size shown denotes the rated tank capacity.

## > WHAT'S YOUR CLIMATE?



## > WHAT'S YOUR REC'S ZONE?



# Hills ESTEEM™ II solar hot water systems

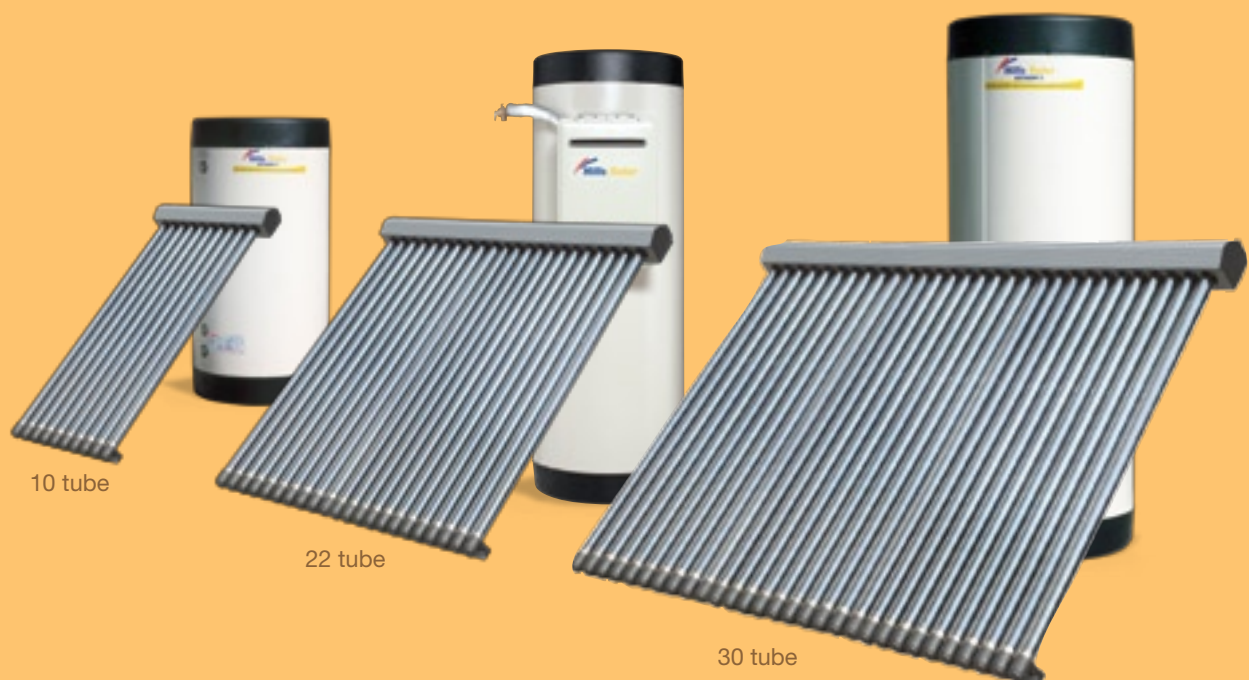
## Stainless steel storage tanks

MODEL NO.	ELECTRIC BOOSTED SYSTEMS	RECs			
		Z1	Z2	Z3	Z4
HS-180-E-10	180L Tank Electric boosted 10 tube collector	14	15	14	11
HS-265-E-22	265L Tank Electric boosted 22 tube collector	29	28	29	24
HS-265-E-30	265L Tank Electric boosted 30 tube collector	32	31	32	28
HS-330-E-22	330L Tank Electric boosted 22 tube collector	28	28	28	23
HS-330-E-30	330L Tank Electric boosted 30 tube collector	32	31	32	27
HS-330-E-40	330L Tank Electric boosted 40 tube collector	35	32	35	30
HS-265-E-22M	265L Tank Mid Element Electric boosted 22 tube collector	33	31	33	30
HS-265-E-30M	265L Tank Mid Element Electric boosted 30 tube collector	36	33	36	33
HS-330-E-22M	330L Tank Mid Element Electric boosted 22 tube collector	31	30	31	27
HS-330-E-30M	330L Tank Mid Element Electric boosted 30 tube collector	35	33	35	31
HS-330-E-40M	330L Tank Mid Element Electric boosted 40 tube collector	38	34	38	34

MODEL NO.	NATURAL GAS BOOSTED SYSTEMS	RECs			
		Z1	Z2	Z3	Z4
HS-180-20NG-10	180L Tank S20 Gas boosted 10 tube collector	19	18	19	16
HS-265-20NG-22	265L Tank S20 Gas boosted 22 tube collector	33	35	33	27
HS-265-20NG-30	265L Tank S20 Gas boosted 30 tube collector	40	41	40	33
HS-330-20NG-22	330L Tank S20 Gas boosted 22 tube collector	33	35	33	27
HS-330-20NG-30	330L Tank S20 Gas boosted 30 tube collector	39	40	39	33
HS-330-26NG-30	330L Tank S26 Gas boosted 30 tube collector	39	40	39	33
HS-330-26NG-40	330L Tank S26 Gas boosted 40 tube collector	45	45	45	39

MODEL NO.	LPG BOOSTED SYSTEMS	RECs			
		Z1	Z2	Z3	Z4
HS-180-20LP-10	180L Tank S20 LPG boosted 10 tube collector	19	18	19	16
HS-265-20LP-22	265L Tank S20 LPG boosted 22 tube collector	33	35	33	27
HS-265-20LP-30	265L Tank S20 LPG boosted 30 tube collector	40	41	40	33
HS-330-20LP-22	330L Tank S20 LPG boosted 22 tube collector	33	35	33	27
HS-330-20LP-30	330L Tank S20 LPG boosted 30 tube collector	39	40	39	33
HS-330-26LP-30	330L Tank S26 LPG boosted 30 tube collector	39	40	39	33
HS-330-26LP-40	330L Tank S26 LPG boosted 40 tube collector	45	45	45	39

> Tank size shown denotes the rated tank capacity.



# Hills EXCEED™ solar hot water systems

## Vitreous enamel (glass lined) storage tanks

### RECs

MODEL NO.	ELECTRIC BOOSTED SYSTEMS	Z1	Z2	Z3	Z4
HS-GL-180-E-10	175L Tank Electric boosted 10 tube collector	14	14	14	10
HS-GL-265-E-22	270L Tank Electric boosted 22 tube collector	29	28	29	24
HS-GL-265-E-30	270L Tank Electric boosted 30 tube collector	32	31	32	27
HS-GL-330-E-22	340L Tank Electric boosted 22 tube collector	28	28	28	23
HS-GL-330-E-30	340L Tank Electric boosted 30 tube collector	32	31	32	27
HS-GL-330-E-40	340L Tank Electric boosted 40 tube collector	35	33	35	30

### RECs

MODEL NO.	NATURAL GAS BOOSTED SYSTEMS	Z1	Z2	Z3	Z4
HS-GL-180-20NG-10	175L Tank S20 Gas boosted 10 tube collector	19	18	19	16
HS-GL-265-20NG-22	270L Tank S20 Gas boosted 22 tube collector	33	35	33	27
HS-GL-265-20NG-30	270L Tank S20 Gas boosted 30 tube collector	40	41	40	34
HS-GL-330-20NG-22	340L Tank S20 Gas boosted 22 tube collector	33	35	33	27
HS-GL-330-20NG-30	340L Tank S20 Gas boosted 30 tube collector	39	40	39	33
HS-GL-330-26NG-30	340L Tank S26 Gas boosted 30 tube collector	39	40	39	33
HS-GL-330-26NG-40	340L Tank S26 Gas boosted 40 tube collector	46	45	46	40

### RECs

MODEL NO.	LPG BOOSTED SYSTEMS	Z1	Z2	Z3	Z4
HS-GL-180-20LP-10	175L Tank S20 LPG boosted 10 tube collector	19	18	19	16
HS-GL-265-20LP-22	270L Tank S20 LPG boosted 22 tube collector	33	35	33	27
HS-GL-265-20LP-30	270L Tank S20 LPG boosted 30 tube collector	40	41	40	34
HS-GL-330-20LP-22	340L Tank S20 LPG boosted 22 tube collector	33	35	33	27
HS-GL-330-20LP-30	340L Tank S20 LPG boosted 30 tube collector	39	40	39	33
HS-GL-330-26LP-30	340L Tank S26 LPG boosted 30 tube collector	39	40	39	33
HS-GL-330-26LP-40	340L Tank S26 LPG boosted 40 tube collector	46	45	46	40

> Tank size shown denotes the rated tank capacity.





Unit J, 5 Butler Boulevard  
Burbridge Business Park  
Adelaide Airport SA 5950

PO Box 69  
Export Park SA 5950

**1300 363 386**  
**[hillssolar.com.au](http://hillssolar.com.au)**

**[info@hillssolar.com.au](mailto:info@hillssolar.com.au)**



*Hills Solar has made every reasonable attempt to ensure the accuracy of the information contained within this brochure. However, it does not guarantee the information is complete, correct, or up to date and the information, including the availability of individual items, is subject to change without notice. In no event shall Hills Solar be liable to any person under any law for any loss or damage related to any information in the brochure. Government rebates and incentives are subject to change without notice. Images are for illustrative purposes only.*

© Copyright 2010. Printed on recycled paper.

SLR BRO13 v1.0