



**Hills Solar**  
Solar Solutions for Life

**ESTEEM™**  
EVACUATED TUBE SOLAR HOT WATER

## Solar Power. Introduced 1945.



Hills, long known as the 'clothesline' or 'hoist' company, is now much more than a manufacturer of clever clotheslines. Hills is now a diversified manufacturer of innovative Australian products and services that highlight the quality and dependability that people have come to expect from Hills.

Hills operates businesses in three industry segments: Home, Hardware and **Eco**, Electronic, Security, Entertainment, and Building and Industrial. Market capitalisation for the Group is in excess of \$1 billion and Hills currently employs more than 3,000 people in Australia and New Zealand.



Hills Industries Limited, an Australian Icon, is a public company listed on the Australian Stock Exchange (Code: HIL).



## Clean. Green. Efficient. Evacuated Tube Technology.

As we embrace the 21st century our ideals need to change. Our planet's precious resources are dwindling and we must look at clean alternative energy supplies.

The Sun can provide all the energy we require and as manufacturers of the Hills Hoist in 1946, the most environmentally friendly way to dry clothes, we again look to the Sun. We recently launched the Hills Esteem™

Solar Hot Water System, using advanced Evacuated Tube technology. This simple solution, when installed in your home, can reduce CO<sub>2</sub> emissions by approximately three tonnes per year, which is equivalent to taking a small car off the road. At Hills we continue to develop products that use alternative energy supplies, as we believe our planet and our families are our most important assets.

**Heating your household water is the major consumer of energy in most homes. Installing a Hills Esteem™ Solar Hot Water System will not only help the environment by reducing CO<sub>2</sub> emissions, it can also reduce your hot water heating costs by up to 80%.**





# Relax

...it's **Solar**

**ESTEEM™**

EVACUATED TUBE SOLAR HOT WATER



### **Hills Solar Evacuated Tubes**

Evacuated Tube technology delivers significantly better performance than traditional absorbers on the market today. Their advanced design incorporates tubes that consist of 2 layers of high quality borosilicate glass with a vacuum layer between them. This vacuum acts like a thermos flask, retaining up to 97% of the thermal energy, resulting in increased efficiency. The Sun's thermal energy is then transferred to the manifold via the heat pipe located inside each tube.

The small amount of evaporative liquid in each tube is super heated by the Sun's energy and forms a vapour. The vapour rises to the top of each pipe; this heat is then transferred to the water flowing through the manifold. The heated water is then returned to the tank.

The cylindrical design of the tubes ensures effective collection of the Sun's thermal energy throughout the day.

Hills Solar Evacuated Tubes are frost tolerant and have passed the AS/NZ 2712:2007 Standards for both hail and freeze resistance. Hills Esteem™ Solar Hot Water Systems have passed the freeze test to  $-15^{\circ}\text{C}$  without the need for a heat exchanger or glycol

### **Stainless Steel Tanks**

Hills Esteem™ Solar Systems use stainless steel tanks which have a natural oxide barrier to corrosion. Stainless steel tanks are tough, durable and lighter than their equivalent vitreous enamel mild steel tanks. The tanks are of a high quality and offer a 10 year warranty.

### **Gas and Electric Boosting**

When radiant heat is low and there is cloud cover or rain, Hills Solar offers a choice of gas or electric boosting to heat the water to your desired temperature.

Hills Esteem™ Gas Boosted Solar Systems use Bosch continuous flow boosters, available in both 21e, which will deliver up to 21 litres of hot water per minute, or the Bosch 26e, which will deliver up to 26 litres of hot water per minute on a low solar gain day.

Hills Esteem™ Electric Boosted Solar Systems ensure the water is maintained at  $60^{\circ}\text{C}$ . The system comes with a standard 3.6kw bottom-heating element; however, this can be changed to a 2.4 or 4.8kw element to conform to different State regulations. Clever positioning of the element ensures you will have a full tank of hot water available.

Some States may offer a lower tariff on hot water heating.

### **Renewable Energy Certificates (RECs)**

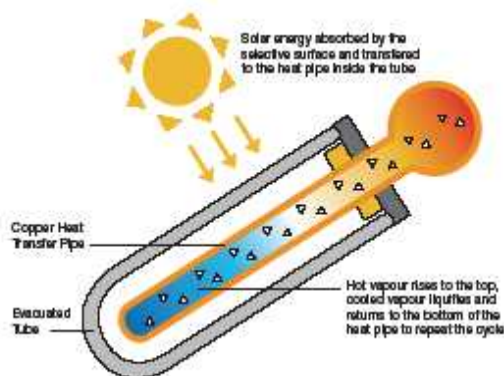
RECs are a form of currency created by the Federal Government under the Renewable Energy (Electricity) Act 2000 and are used to demonstrate compliance with the requirements of the Government's Mandatory Renewable Energy Target (MRET) scheme. Hills Esteem™ Solar Systems qualify for these generous Government Rebates (conditions apply). There are 4 Australian zones which will determine the amount of RECs per system. Some State Governments and local Councils also offer generous rebates on Hills Esteem™ Solar Systems. This can mean a rebate of up to a third of the cost of your Hills Esteem™ Solar Hot Water System. For a complete list of REC zones by postcode please visit [www.orer.gov.au](http://www.orer.gov.au)



## Frequently Asked Questions

### Why choose a Hills Esteem™ Evacuated Tube Solar Hot Water System?

Evacuated Tube technology has been used in Europe for many years and is more efficient in cooler climates than standard flat plate technology. At Hills we have undertaken research to choose a quality system that will perform best in all conditions especially in winter when thermal energy is at its lowest therefore giving you the best possible performance all year.



### Will my system work on a cloudy day?

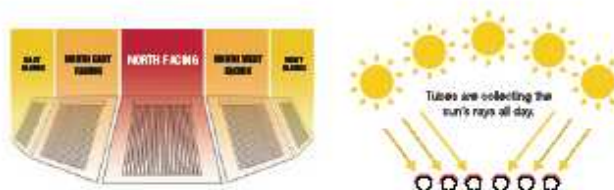
Even on cloudy and rainy days you may still achieve some solar gain. The Hills Esteem™ Solar System is available with an electric or gas booster to assist heating the water on poor solar gain days.

### Are Hills Esteem™ Solar Systems eligible for Government rebates?

Providing you meet the Federal Government's criteria all Hills Esteem™ Solar Systems are eligible for RECs (Renewable Energy Certificates). There is also a \$1,000 Federal Government rebate. For more information visit <http://www.orer.gov.au> (Office of the Renewable Energy Regulator). Some States and local councils also offer incentives for the installation of solar hot water systems.

### Which is the best collector orientation?

The ideal location for collectors is facing due North, however 45 degrees North West or North East is acceptable with minimal effect due to the cylindrical design.



### Why do Hills use stainless steel storage tanks?

Stainless steel tanks have a natural oxide barrier to corrosion, therefore eliminating the requirements for a sacrificial anode, which saves the cost of replacement approximately every five years. Stainless steel tanks also have a longer life than standard vitreous enamelled tanks and attract a ten year warranty.

### Will my Hills Esteem™ Solar System freeze?

Hills Solar Evacuated Tubes are frost tolerant and have passed the AS/NZS 2712: 2007 Standards for both hail and freeze resistance. Hills Esteem™ Solar Hot Water Systems have passed the freeze test to  $-15^{\circ}\text{C}$  without the need for a heat exchanger or glycol.

### Can I fit a Hills Esteem™ Solar system to my existing hot water system?

In most cases a Hills Esteem™ Solar System can be retro-fitted to an existing hot water tank. Please consult your local dealer for more information.

**For more information please contact Hills Consumer Advice on 1300 363 386 or visit our website at [www.hillssolar.com.au](http://www.hillssolar.com.au)**



Suggested Tank Size	
160 Litre <sup>#</sup> ~ Electric / Gas Boosted ~ 1 to 2 People	👤👤
250 Litre <sup>#</sup> ~ Electric / Gas Boosted ~ 3 to 4 People	👤👤👤👤
315 Litre <sup>#</sup> ~ Electric / Gas Boosted ~ 5 to 6 People	👤👤👤👤👤👤

<sup>#</sup>Suggested usage only.

Product Code	Electric Boosted Systems
EB-160-E-10	160L Electric Boosted 10 Tube Collector
EB-250-E-10	250L Electric Boosted 10 Tube Collector
EB-250-E-22	250L Electric Boosted 22 Tube Collector
EB-250-E-30	250L Electric Boosted 30 Tube Collector
EB-315-E-22	315L Electric Boosted 22 Tube Collector
EB-315-E-30	315L Electric Boosted 30 Tube Collector
EB-315-E-40	315L Electric Boosted 40 Tube Collector

Product Code	LPG Boosted Systems
GB-250-21LP-10	250L 21e LPG Boosted 10 Tube Collector
GB-250-21LP-22	250L 21e LPG Boosted 22 Tube Collector
GB-250-21LP-30	250L 21e LPG Boosted 30 Tube Collector
GB-315-21LP-22	315L 21e LPG Boosted 22 Tube Collector
GB-315-21LP-30	315L 21e LPG Boosted 30 Tube Collector
GB-315-25LP-30	315L 26e LPG Boosted 30 Tube Collector
GB-315-25LP-40	315L 26e LPG Boosted 40 Tube Collector

Product Code	Natural Gas Boosted Systems
GB-250-21NG-10	250L 21e Gas Boosted 10 Tube Collector
GB-250-21NG-22	250L 21e Gas Boosted 22 Tube Collector
GB-250-21NG-30	250L 21e Gas Boosted 30 Tube Collector
GB-315-21NG-22	315L 21e Gas Boosted 22 Tube Collector
GB-315-21NG-30	315L 21e Gas Boosted 30 Tube Collector
GB-315-25NG-30	315L 26e Gas Boosted 30 Tube Collector
GB-315-25NG-40	315L 26e Gas Boosted 40 Tube Collector

Product	Parts	Labour <sup>#</sup>
Tank	10 years	1 year
Evacuated Tube Collectors	10 years	1 year
Gas Booster Heat Exchanger	10 years	3 years
Gas Booster - Other Parts <sup>#</sup>	3 years	3 years
Electrical Components	1 year	1 year
Pump	1 year	1 year
Mounting Frame	10 years	1 year

<sup>#</sup>Conditions Apply. For full details please visit our website or view the warranty card.

## System Selector<sup>#</sup>

Choosing your Hills Esteem™ Solar Hot Water System

160 Litre Esteem™ will provide sufficient hot water for up to 2 people.

250 Litre Esteem™ will provide sufficient hot water for up to 4 people.

315 Litre Esteem™ will provide sufficient hot water for up to 6 people.



10 Tube Collector



160 Litre Tank



22 Tube Collector



250 Litre Tank



30 Tube Collector



315 Litre Tank

Specialising in Battery & Inverter Systems

## Cooloola Solar Systems

Standalone Systems  
Grid Connect Systems  
Consultancy Services

[www.coolasola.com.au](http://www.coolasola.com.au)



Lynne  
54824302  
Accid No F689

Richard  
54866259  
0428775501  
rich@coolasola.com.au  
Elec Cont Lic No 68338  
Installer Accd No F688

# 1300 363 386

[www.hillssolar.com.au](http://www.hillssolar.com.au)

944 - 956 South Rd, Edwardstown  
South Australia 5039 AUSTRALIA

© Copyright Hills Industries 2008  
Images used in this brochure are for illustration purposes only.  
System configurations may be subject to change without notice.

