

# Solar Savings Made Easy

STID BOLT-ON



Upgrade your existing electric element or gas bottle water heater to solar.

Why waste money when you can save around \$600 pa.\*

www.siddonssolarstream.com

## **Family Friendly**

We all love a long, hot shower. But did you know, your electric element hot water heater can be a whopping 1/3 of your household power bill?

At last, a new and brilliantly designed heat pump water heater that works with any hot water storage tank. If you're renting or moving house, you can even take it with you.

- Upgrade your existing electric element or gas bottle water heater and save on horrendous running costs.
- Convert your existing storage tank water heater that may no longer be working and save on purchasing a new storage tank.
- → Purchase the BOLT-ON with a new storage tank and be eligible for government rebates to reduce the purchase cost.



Uses up to 75% less electricity than an electric element water heater.

**75**%



<sup>\*</sup>Savings based on a typical 2 parent/2 child family with an electric element water heater costing around \$800 pa.



**SAVE 75%** 

FAMILY OF Y = 5600 P.A.

> GOVERNMENT REBATES

### **How Does the BOLT-ON Work?**

As long as the air temperature is above -5°C, the Siddons BOLT-ON can make hot water above 60°C. This is because the refrigerant in the heat pump is in a liquid state at -26°C, so air above -5°C is relatively hot giving a good temperature differential with which to make hot water.

The heat in the air is absorbed into the refrigerant evaporating it into a gas which can then be compressed to superheat to 95°C. This heat is then transferred to the tank via the

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heat pump works in any weather, night and day. BOLT-ON's Dynamic Cycle heat exchanger.

Outdoor Air Intake Air Heat to Gas

to Superheat

Superheat

**Hot Water** 



The BOLT-ON

- The Siddons BOLT-ON extracts solar heat from the air night and day, taking full advantage of off-peak energy tariffs. No matter what temperature or weather conditions outside, be it raining, freezing cold or extreme heat, the BOLT-ON operates efficiently without the need for electrical boosting.
- The storage tank water is cycled through the Dynamic Cycle heat exchanger in the BOLT-ON heat pump via two water circulation hoses. It heats the storage tank water quickly and efficiently so after just one hour, it would be hot enough to have a shower.
- In most situations, the BOLT-ON only needs to run for around 3 hours per day on average for a typical family, using around 3kW.

## **Very Easy to Transport and Install**

These units are a cinch to install.

**Transport:** The Siddons BOLT-ON has been designed for easy transportation. A heat pump water heater is much easier to handle if the heat pump is separate from the storage tank. You can even transport it in your Ute or station wagon.

**Installation:** These units are a cinch to install because there are no refrigeration connections to make, just water fittings, a sensor probe and an electrical plug. Also, the BOLT-ON gives you flexible installation options such as putting the tank in a garage or laundry with the heat pump outside or vice-versa in the tropics.

### **Comparison Table for Different Water Heaters**

Features	Heat Pump	Electric Element	Gas Grid	Gas Bottle	Solar Panel
Low running cost	<b>✓</b>		<b>✓</b>		<b>~</b>
Good house energy rating	~		<b>✓</b>		<b>~</b>
No pilot light	~	~			<b>~</b>
No gas bottles to fill	<b>✓</b>	~	<b>✓</b>		<b>~</b>
Copes with dense trees	~	~	<b>✓</b>	~	
Architecturally pleasing	~	~	~	~	
Does not waste water	~	~	#	#	#
Easy installation	~	~	<b>✓</b>	~	

<sup>#</sup>If the water heater is an instantaneous type, check if water is wasted as it draws the hot water through.

If the water heater is a solar panel type, check if water is dumped to cool the unit during times of high summer heat.

#### The BOLT-ON can be used for:

- Homes and light commercial applications such as offices, factories, restaurants, medical centres and schools.
- Large commercial applications such as hotel/motels, gymnasiums, health spas, dairies, laundries or car washes by augmenting the existing water heating equipment particularly during winter when solar radiation is weak and hot water use is high. Just bolt it on to the existing hot water storage tanks and save.

#### **Details at a Glance**

- Digital controller with diagnostic functions, tank and ambient air temperature display plus refrigeration pressure gauge for easy performance monitoring
- Low noise heat pump just 48 dBa
- Cool running compressor for longer life
- Two built-in timers for optional regulation of the daily on/off time and ring main system (for large homes with multi bathrooms, check our website for further information)
- 1kW of power yields 3.5kW of heat at 20 deg C, efficiency increases by more than 20% per 10 deg C rise in air temperature
- Operating range between -5°C and 45°C air temperature
- Quality components sourced globally including Grundfos water circulating pump and Toshiba compressor
- Recommended storage tanks are Australian made
- For zero Greenhouse hot water, add a small solar or wind electricity generating system
- Siddons Solarstream is 100% Australian owned.

## **Choose the Right Storage Tank for You**

- The Siddons BOLT-ON has been designed to work with stainless steel storage tanks for pure, mountain sourced water supply and vitreous enamel / glass lined steel storage tanks with anodes for mineralised / chlorinated water, typically west of the Great Dividing Range
- For 2-3 BR house, choose 250 litre storage tank, maximum dimensions: D 650 x H 1620mm, W 62/75kg (SS/VE)
- For 3 BR & bath use or 4-5 BR, choose 315 litre storage tank, maximum dimensions: D 650 x H 1980mm, W 73/90kg (SS/VE)
- For 4-5 BR & bath use, choose 400 litre storage tank D 680 x H 1760mm, W 100kg (VE only)
- For use with rain water, your water may be acidic and require pH balancing for longer storage tank life. Check with your plumber or our website
- For commercial storage tank applications above 420 litres capacity, you will likely require more than one BOLT-ON heat pump. Check with Siddons.