TAKE CONTROL OF YOUR HOT WATER HEATING

AND SAVE UP TO 70%.

ecospring
HOT WATER SYSTEMS

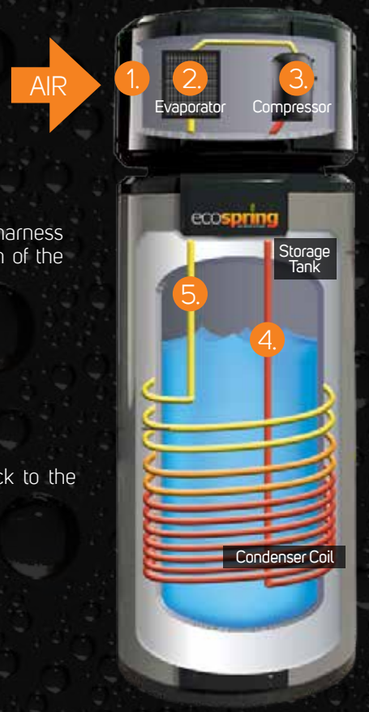
Smart Hot Water Heating

EcoSpring Water Heaters are the next generation in water heating. Using heat pump technology, water is heated by harnessing naturally occurring thermal energy from the air. EcoSpring also utilises smart technology that allows you to control and manage the way you heat your water with a simple to use control panel.

How EcoSpring Works

EcoSpring Heat Pump Hot Water Cylinders work much like a fridge, but in reverse. They harness the ambient temperature in the air, multiplying this heat to heat the water at a fraction of the energy of a traditional hot water cylinder.

1. A fan pulls in air, containing heat energy, across the evaporator.
2. The evaporator turns the liquid refrigerant into a gas.
3. The compressor converts refrigerant into high temp / high pressure gas.
4. The hot gas inside the condenser coil heats the water inside the tank.
5. The refrigerant reverts back to a liquid after heating the water & continues back to the evaporator for the process to start again.



The Energy Equation

1.0kW Power Input + 2.60kW Atmospheric Heat = 3.60kW Hot Water

A heat pump is like an energy amplifier. From 1 kW of power input, it can create over 3.6kW of output heat. That's a performance efficiency of over a remarkable 300%. Conventional electric storage water heaters can only convert 1 kW of input power into 1 kW of output heat.

Reduce Power Bill
Save money, with water heating costs reduced by up to 70%.

Renewable Energy
Harnesses naturally occurring thermal energy from the air to heat the water.

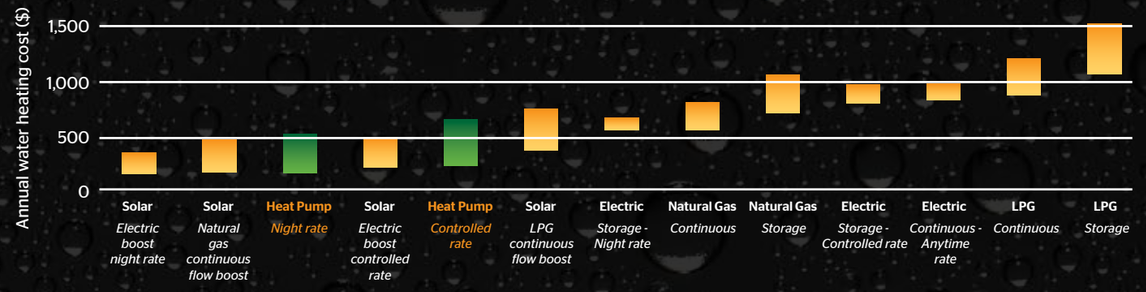
4 Year Payback
Typically, the initial investment will be paid back within 2 - 4 years.

Inside/Outside Installation
Designed to withstand weather. Standard electrical connection, standard cold water inlet and hot water outlet. (Rain Cover required for the ES300+)

Advanced Controls
ES190 (Economy, Hybrid & e-Heater modes) ES300+ (Heat Pump & e-Heater modes)

Real Time Control
24 hour timer allows accurate water heating control to take advantage of the higher daytime temperatures & eliminate noise during the night.

Indicative running costs of water heating options* (Three person household)



*Source: http://www.energywise.govt.nz/node/18187 (September 2013)

Advanced Controls

Economy Mode - Model ES190
The unit utilises the heat pump to heat water. This is the most efficient mode possible, thus allowing the greatest savings.

Hybrid Mode - Model ES190
While the unit uses the heat pump as its primary means to heat the water, the standard electric elements will activate if the ambient air temperature is low. -7°C <T4< 12°C

Heat Pump Mode - Model ES300+
While the unit uses the heat pump as its primary means to heat the water, the standard electric elements will activate if the ambient air temperature is low. -7°C <T4< 12°C

e-Heater Mode - Both Models ES190 & ES300+
This mode shuts off the heat pump and only uses the electric elements to heat the water, just like a standard electric water heater. eHeat mode allows for operation in colder situations (less than -7°C) where heat pump would not function ideally.

Models

ES300+
300 Litre Cylinder

Suitable for 3+ people in a larger household.

Installation - Outside
Outside installations require a concrete pad & an EcoSpring Rain Cover to ensure the ducts are protected from the weather.

Installation - Inside
Inside installations can utilise extra efficiencies by ducting cold air out of the house using a Ducting Kit.

ES190
190 Litre Cylinder

Suitable for 1-2 people in a small dwelling

Installation - Outside
Outside installations require a concrete pad
Installation - Inside
Inside a garage with adequate ventilation.

Ideal House - 8 homestar rated

We installed an EcoSpring ES300 in our home which was designed to 8 Homestar rating, as well as being a Positive Energy Passive House.

Not only has it contributed to our goal of low energy consumption, but it has also impressed us with its quietness, ease of operation and quick recovery time. We have already recommended it to others and would gladly choose to install one in future projects.

Lee Ann and Murray Durbin, The Ideal House

Endorsed By All Major Plumbing Mechants In New Zealand

When it come to EcoSpring, it's a real endorsement when all major plumbing merchants in New Zealand stock our product. They can all supply the product to any location in New Zealand and will recommend a qualified plumber to install your EcoSpring.

mico · CHESTERS · plumbingworld · PLUMBING PLUS · O'Brien · reece · FRANKLIN · OAKLEYS

Specifications

Model		EcoSpring ES190			EcoSpring ES300+	
Mode		Economy	Hybrid	E-Heater	Heat Pump	E-Heater
Heating Capacity		1500W	Heat Pump 1500W E-Heater 2150W	2150W	3000W	3000W
Rated Input/ Current		529W/ 2.3A	1860W/ 8.1A	2150W/ 9.5A	4300W/ 18.7A	3000W/ 13.0A
Power Supply		220-240V-50Hz			220-240V-50Hz	
Operation Control		Auto/Manual startup, real time control, error alarm, etc			Auto/Manual startup, real time control, error alarm, etc	
Protection		High-pressure protector,overload protector, temp controller and protector, electric leakage protector			High-pressure protector,overload protector, temp controller and protector, electric leakage protector	
Compressor Power		440W			850W	
E-Heater Power		2150W			3000W	
Refrigerant		R134a (0.8kg)			R134a (1.2kg)	
Water Pipeline System	Outlet Water Temp	Default 60°C, 38°C - 70°C adjustable			Default 55°C, 38°C - 60°C adjustable	
	Water Side Exchanger	Surface heat exchanger			Surface heat exchanger	
	Diameter	DN20			DN20	
Max Pressure		1.0MPa			1.0MPa	
Exchanger Air Side	Material	Hydrophilic aluminum fin Inner groove copper tube			Hydrophilic aluminum fin Inner groove copper tube	
	Motor Power	35.5W			68W	
Dimension		568mm x 1580mm			650mm x 1920mm	
Water Tank Capacity		190L			300L	
Net Weight		90kg			145kg	
Cylinder Construction		Enamelled steel			Enamelled steel	
Warranty		3 Year Comprehensive			3 Year Comprehensive	

ecospring HOT WATER SYSTEMS

www.ecospring.co.nz

parex

Parex Industries Ltd. | 5 Tolich Place, Henderson 0610.
p. (Auckland): 09 836 6566 | p. (nationwide): 0800 200 510
e. info.parex@emerson.com | www.parex.co.nz