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# its<sup>TM</sup> heat pumps



member of  
**sesta**  
SUSTAINABLE ENERGY SOCIETY  
HEAT PUMPS



## What is a heat pump?

A domestic hot water heat pump is a very efficient water heating device. It uses a small amount of electricity to produce up to four times more heat energy. So by connecting an ITS heat pump to your existing hot water cylinder you can divide your hot water electrical consumption by up to four. Unlike a solar geyser, a heat pump is not directly dependent on the sun and therefore it can operate day and night, winter and summers, ensuring the highest possible saving and piping hot water 24/7.

## How long have heat pumps been around?

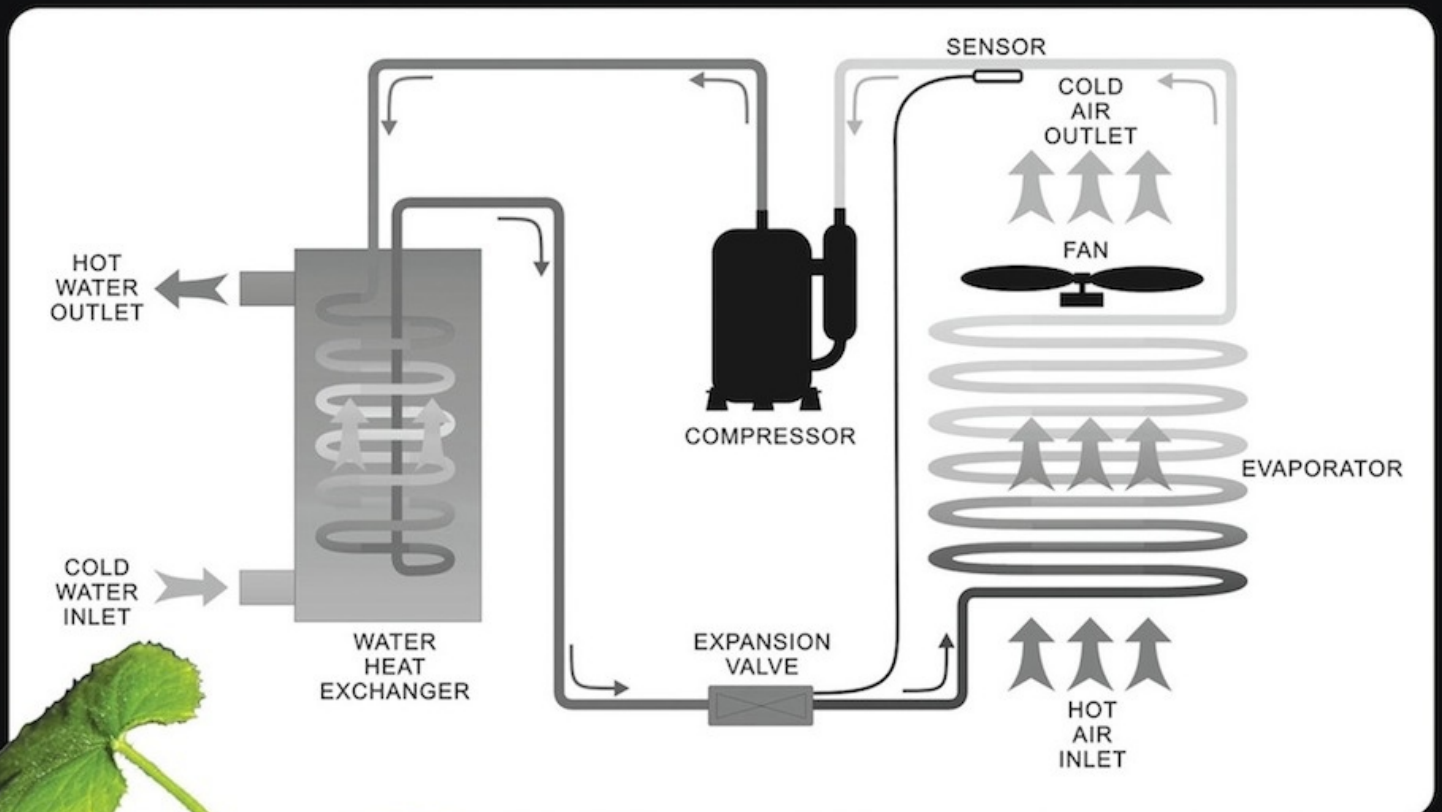
Heat pumps have been around for a long time and have been extensively and very successfully used in commercial applications for many years. In fact, your household fridge is also a heat pump.

## How much will I save?

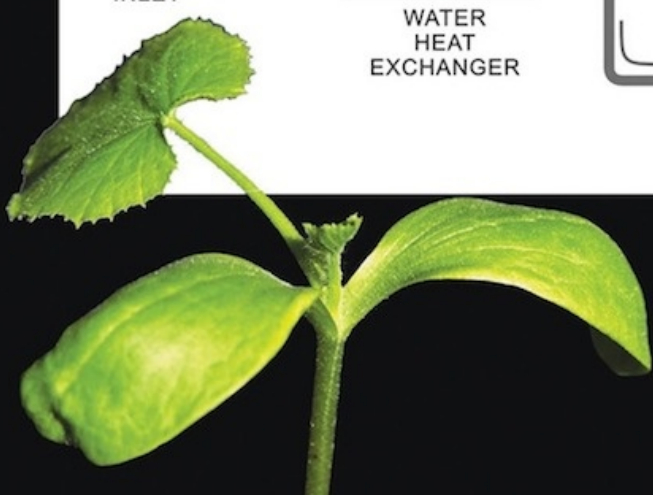
A typical family of four that uses water conservatively uses about R550 of electricity per month to heat water (working on R1.20/kWh). Installing an ITS heat pump will guarantee you an average saving of about R350 per month which means a return on investment of less than 3 years.

## How does a heat pump work?

A heat pump works like an air conditioning unit in reverse. It extracts heat from the ambient air surrounding it, enabling it to heat the refrigerant which is then compressed causing it to get even hotter. This is then run through a heat exchanger in which the water is heated. The refrigerant is then allowed to expand again, thus cooling it down and enabling it to again absorb heat from the surrounding air. So only a little electricity is used to run a fan and compressor while the heat energy is provided indirectly by the sun.



South Africa's leading **heat pump** supplier.





# ITS Heat pumps – the most cost effective solution to heating your geyser!



## / Key Features

- Quiet operations, with no solar collectors on the roof
- Fully automated control with adjustable water temperature setting and anti-freeze protection
- Environmentally friendly - extreme energy efficiency, with no greenhouse gas emissions
- Safe & Reliable
- Class leading efficiency ensuring maximum possible saving
- Patented integration technique
- High quality components ensuring many years of trouble free operation
- Simple installation