

# Geothermal Heat Pumps

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We are paying more for electricity than ever, and the price will continue to rise as international carbon trading kicks in. Lower energy light globes and switching off power hungry appliances helps but generally the big cost in our homes is heating and cooling. A new publication titled Geothermal Heat Pumps: Installation Guide shows how we can reduce our electricity bills by anything up to 60%.

Today's geothermal systems outperform the best gas technology, by an average of 36% in heating mode and 43% in cooling mode. According to the United States Environmental Protection Agency geothermal heat pumps are the most energy-efficient, environmentally clean, and most cost-effective space conditioning systems available. There is no doubt that geothermal heat pumps are the low hanging fruit of energy efficiency, which is a bit like picking apples or oranges off a tree. The simple part of picking fruit is the easy-to-reach apples or oranges. Once these have been picked it gets harder, reaching on tippy-toes, until we finally start dragging the ladder around. Geothermal heat pumps are low-hanging-fruit, and utilizing this resource really is a no-brainer. Over the last 50 years heat pumps have evolved from backyard experiments designed by enthusiasts into mainstream technology. Not that this is really new technology as the Romans many centuries ago heated their baths using a similar concept. Of course the systems these days are much more efficient, and can deliver between 2.5-4.5 units of heat for every unit of energy consumed. This means they are generally 1.4 times more energy efficient than a gas fired boiler. Apart from being cost effective, geothermal heat pumps deliver gentle heat to your home without producing any soot at your home or any other toxic exhaust. Systems can be retro-fitted or integrated into new buildings. The Geothermal Heat Pumps: Installation Guide provides in-depth detail on installation, so you can understand how to make this free energy work for you. With the rebates and grants available to buffer the capital cost, it is a great time to save money on heating and cooling costs, while doing your bit for the environment.