

It's A Wrap

Up to 47% of your power bill can be spent on water heating. So it makes sense to ensure you're retaining the heat of your hot water cylinder and not wasting money continuously keeping your water hot.

Insulating your hot water cylinder and hot water pipes can potentially save up to 10% on your power bill. Adjusting your hot water cylinder to the correct temperature, installing a low-flow showerhead and fixing dripping hot taps are all ways in which you can reduce your power bill even further .

What effect will a cylinder wrap have on the airing cupboard?

Many people use their hot water cylinder cupboard for drying clothes. If your hot water cylinder cupboard is warm enough to dry clothes then you're losing a lot of valuable heat from your cylinder.

It's more energy-efficient to install a hot water cylinder wrap and dry your clothes outside or in a dryer, than it is to lose heat from your cylinder every minute of the day and night. If you install a hot water cylinder wrap and switch to using the dryer two hours a week, you can save up to 2.5 times the energy.

Are there different types of wraps?

There are several different brands of cylinder wraps available. You'll need to make sure that you have the correct size of wrap for your cylinder as they vary, as does the insulation value (R-value) of the wraps. The higher the R-value, the more effective the insulation and the more heat that will be retained in your cylinder.

Not all cylinder wraps have the R-value clearly identified on the packaging. The following table will provide you with R-values of the different brands known to Environment Canterbury.

Brand	R-value <small>(as per manufacturers specifications)</small>
Tasman	1.3
Eco-wrap (Autex)	1.0
Terra Lana (Wool)	1.3 and 1.8
Insultech	1.2



Will using a hot water cylinder wrap reduce my power bill?

Almost all hot water cylinders will benefit from a cylinder wrap. If you touch your cylinder and it feels warm – even a little, especially along the top of the cylinder, then you need a hot water cylinder wrap. Only A-grade cylinders (look for an 'A' on the side of the cylinder) are quite well insulated already and may not benefit economically from a cylinder wrap.

A hot water cylinder wrap costs between \$50-90 to buy and it will pay for itself within 18 months. After that, you'll save around \$60 each year on your power bill.

Can I install my own wrap?

You may install your own hot water cylinder wrap or you can use an organisation such as Community Energy Action (CEA) in Christchurch (tel. 374 5698) to install the wrap for you.

To install a hot water cylinder wrap you'll need to have good access to the cylinder and at least 5 cm clearance all around the cylinder. If there is good access around the cylinder, it should take about two hours to install the wrap. Hot water cylinder wraps can be purchased from many hardware and DIY stores (Tasman), the Warehouse (Eco-wrap), Community Energy Action (Terra Lana) or directly from Terra Lana and Insultech in Christchurch.

What about pipes and leaking taps?

Hot water can rapidly lose heat through the pipes before it reaches your kitchen, bathroom or laundry taps. To prevent heat loss from hot water pipes, simply wrap the whole length of the pipe with lagging material. If the pipes are not accessible, wrap at least the first metre of the hot water pipe coming out of your hot water cylinder. Don't forget to wrap wetback connections as well.

Check all of your hot water taps and pipes to make sure they are not leaking. It's usually more economical to fix the problem than pay a higher power bill.

At what temperature should the hot water cylinder be set?

The ideal temperature for your hot water cylinder is 60 degrees Celsius (or 140 degrees Fahrenheit). A higher temperature will waste power and is also dangerous and could result in scalds.

You'll find the thermostat under the protective lid on the side or underneath your cylinder and it can usually be adjusted with a screwdriver. Many thermostats aren't very accurate, so it's a good idea to test the temperature of the water that comes out of the tap. The temperature of your tap water should be 55 degrees Celsius (131 degrees F).

What else can be done to reduce water heating costs?

By installing a water saving, or low-flow showerhead, you will be saving up to 10 litres of water a minute. A low-flow showerhead costs approximately \$30, is easy to install and can be used on all pressure systems.

To test if you need a low-flow showerhead, turn your shower on at your usual temperature and fill a bucket for one minute. If there are more than 6-10 litres in the bucket, you do not have a low-flow showerhead.

Gas and solar hot water heating

Instantaneous gas water heating only heats the water being used, so it's very energy efficient. If you're building a new house or installing gas for home heating, instantaneous gas water heating may be a good option for you.

A solar hot water heater can provide 50-70% of your hot water needs for free. A solar hot water heater costs between \$2,000 and \$5,000 and can save over \$220 a year on your power bill.

For more information please contact us by:

Visiting our website: www.ecan.govt.nz

Email: ecinfo@ecan.govt.nz

Visiting our office: Environment Canterbury,
58 Kilmore St, Christchurch

Telephone: 'Clean Air Now' line on (03) 353 9727
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a guide to insulating

your hot water cylinder