



Special Notice to all Consumers of Hot Water

Now you can substantially reduce hot water costs

The ECO GFX is a unique patented product which is already installed in a number of residential homes, hostels, hotels, boarding schools and rest homes around the country. It reduces the water heating costs by around 50% by using the waste hot water to pre-heat the incoming cold water supply.

The ECO GFX works on the principle of Gravity Film eXchange. When water falls down a vertical section of drainpipe, it clings to the inner surface in a very thin film. The heat is then easily and efficiently transferred to the cold water circulating around the outside of the drain pipe.

The system can be more efficient than a heat pump water heater, saves 50 - 60% of shower costs and gives electric cylinders the capacity of gas water heaters. Also very effective when used in conjunction with Quantum or Solar water heating.

Features

- Installation is simple. The GFX unit is attached to the waste pipe by two plumbqwiks (one at either end). The pre-heated supply water can be plumbed into the cold supply of the shower mixer, or into the hot water cylinder/calorifier, or for maximum results, into both.
- For an electric cylinder the first hour rating is tripled! You can obtain 3 times the amount of hot water from the showers in the first hour because the water feeding into the cylinder and/or the shower mixer from the ECO GFX is pre-warmed. This also means there is less likelihood of a cold shower if the power company is switching the water heating to manage their load.
- The perceived advantage of the quick recovery of gas water heating is removed, and considering the additional line and connection charges, an additional gas line may not be necessary.
- The installation of an ECO GFX may mean that a smaller hot water cylinder can be installed.
- The ECO GFX halves the cost of a shower (the major use of hot water in a residential home).

- The ECO GFX is self-cleaning, has no moving parts and requires no maintenance.
- The double wall construction between the waste and incoming water offers additional safety benefits, especially for industrial and commercial use.
- The ECO GFX contributes positively to the environment by recovering waste heat and reducing the temperature of wastewater entering the ecosystem. This helps lengthen the life of the Local Authorities' wastewater drainage systems.

The ECO GFX is ideal for residential homes, hotels / motels, boarding homes and schools, multi-tenanted properties, rest homes, hair salons and many industrial applications.

Typical paybacks in the new residential market are in the order of 2-3 years, depending on all the variables.

For commercial or industrial applications we can design an ECO GFX system to suit your requirements. For example, there are some applications where cooling the wastewater provides more significant benefits than the energy savings. It is possible to install cooling walls where there are large flows of hot water and a number of ECO GFX are installed in an array.

In an installation at the CIT hostels in Upper Hutt, the temperature was logged and verified by the Energy Efficiency Conservation Authority (EECA). Given the existing layout, the most cost-effective installation was to supply the pre-heated water into the cold side of the shower mixer only. The heat recovery was still over 40%.

Installed vertically the ECO GFX requires 850mm vertical drop somewhere in the wastepipe after the shower drain.

Practically no extra plumbing costs when installed in a new home.

Contact Frans Plugge of ECOsystems for further information.

