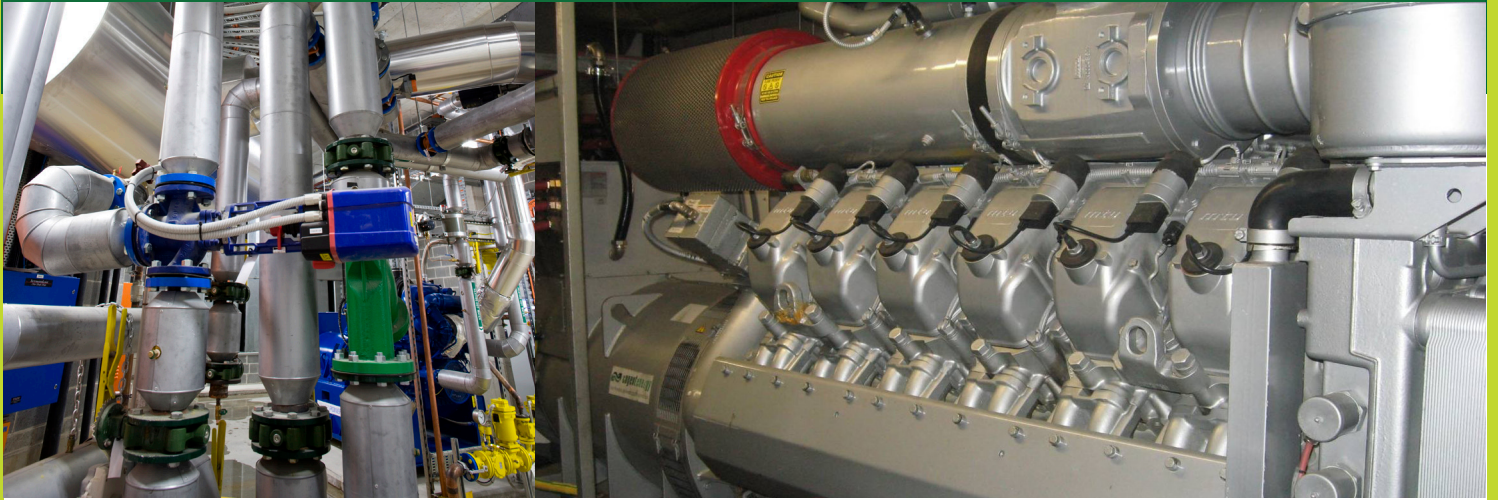


GREEN INFRASTRUCTURE FOR SYDNEY



WHAT IS TRIGENERATION AND HOW DOES IT WORK?

Trigeneration systems are local energy generators which run on natural or renewable gases and produce electricity, heating and air-conditioning for connected buildings. Hence the name trigeneration to describe these three outputs.

They comprise an engine, about the size of a shipping container, which runs on natural gas and produces electricity and captures the heat produced by engine to make hot water. It's bit like the heater in your car, which blows air across the hot motor and into the cabin. The hot water is circulated to surrounding buildings by network of underground pipes.

A second piece of equipment, called an absorption chiller, is located in each connected building which converts the hot water into chilled water, like a refrigerator, for use in air-conditioning units.

Trigeneration systems are nearly three times more energy efficient than coal-fired power stations, which produce almost all of our electricity and 80 per cent of the City's greenhouse gas emissions. This means that with the same amount of fuel they can produce nearly three times more energy, saving you money and reducing pollution by 40 to 60 per cent.

The local aspect of the trigeneration system is also very important. Nearly half your electricity bill pays for transporting electricity, through the state-wide grid of poles and wires, from country regions like the Hunter Valley to Sydney. These "network charges" are set to rise to 60 per cent of your bill over the next two years.

Trigeneration is used widely around the world but the benefits are only just beginning to be recognised in Australia.

For more information visit
cityofsydney.nsw.gov.au

CITY OF SYDNEY

