Facts

Green Infrastructure

CITY OF SYDNEY

Sydney Trigeneration: The Business Advantages

The City's trigeneration project will help insulate Council buildings, central Sydney businesses and NSW electricity consumers from future electricity price rises.

The City of Sydney will be the first capital city in the nation to provide a low-carbon energy alternative. Trigeneration systems are already installed in city buildings owned by GPT Group, Stockland, Westfield, Investa and Mirvac.

The City's plan takes this technology to the next level by connecting clusters of buildings to trigeneration to provide electricity, heating and air-conditioning. This network approach raises the energy efficiency of the system and will reduce carbon emissions in City buildings by an estimated 40 to 60 per cent.

Trigeneration systems are more than twice as efficient as coal-fired power stations that supply most of Sydney's power at present. As they produce electricity, heating and cooling close to where it is needed, local trigeneration systems avoid the high cost of transporting electricity from areas such as the Hunter Valley. These network charges make up 40 per cent of average power bills and are expected to rise to 60 per cent by 2013-14.

This spending on the grid is the main cause of rising electricity prices. NSW energy companies will spend $17.4 billion to upgrade the electricity network over five years to 2013-14. This represents $2,400 per person, or an 80 per cent increase on electricity prices.

A University of Technology study estimates the City's trigeneration project could save $1.5 billion in grid upgrades and new coal fired power stations by 2020.

The report estimates that the City's trigeneration network could fill up to 63 per cent of the gap between electricity supply and demand by 2020. Macquarie Generation and Delta Electricity have plans to build two new power stations at a cost of up to $7 billion. If they were coal-fired they would emit 23 million tonnes of carbon dioxide a year – 15 per cent of NSW's total greenhouse gas emissions, and four per cent for Australia overall.