



20 BOND STREET

Origin's Sydney office at 20 Bond Street aims to be best practice in sustainability and energy efficiency. Cogent Energy has designed and installed a state of the art tri-generation plant. The tri-generation plant provides low CO₂ emissions density electricity when compared to the grid.* It also delivers cooling for the building's air-conditioning system. This helps to reduce Origin's carbon footprint.

BUILDING SPECIFICS

Building Owner:

Mirvac / ING

Location:

20 Bond Street, Sydney

Building Description:

Commercial complex
– premium offices & retail space

Building Size:

32 levels,
35,000 square meters

TRI-GENERATION PLANT CAPACITIES

Operational Date:

21st June 2011

Peak Electrical:

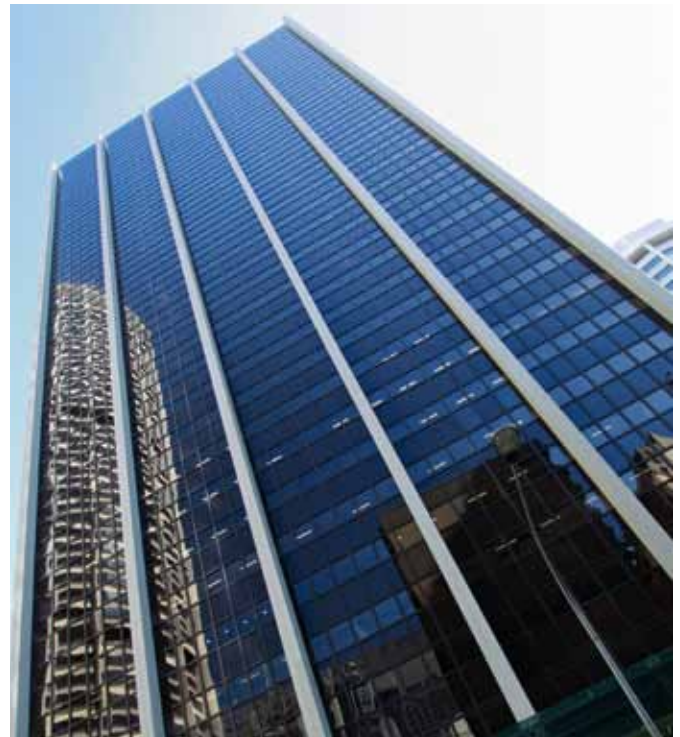
601 kW at 0.8 power factor

Peak Cooling:

660 kW

Energy Efficiency:

80% overall efficiency
(estimated)*



The Bond Street plant comprises of a 601 kW Jenbacher JMS 312 low NO_x natural gas-fired engine that is connected in parallel to the grid. This is connected with a single-double effect Broad absorption chiller to generate 660 kW of cooling, making full use of all engine jacket and exhaust heat. The absorption chiller is fully integrated into the building's chilled and condenser water systems.

FOR MORE INFORMATION

For more information about Cogent Energy go to www.cogentenergy.com.au or contact one of our consultants at (02) 9503 5034

BENEFITS

Energy Efficiency

5 star NABERS rating being targeted.

Getting multiple forms of energy from one fuel can result in an efficiency gain of up to 80% versus the grid average and compared to 38% for the best coal fired power station.*

Sustainability

CO₂ Reduction – Estimated savings of up to 1,200 tonnes of CO₂ per annum.*

Backup

Provides emergency backup if grid connection fails. The plant is configured to operate either in grid parallel import or island mode and operates automatically during the peak and shoulder demand periods or during grid outages as emergency backup.

The plant will normally operate from 7am to 6pm, Monday-Friday.

* www.cogentenergy.com.au; CO₂ savings estimations are calculated based on information from the Australian Government's National Greenhouse Accounts Factors (June 2011). Calculation methodology externally reviewed by PAE Holmes.