Melbourne Water - Melbourne, Australia

The building was given a full 6 Star rating by the Green Building Council of Australia

Access to water is limited in Australia’s fastest growing city. Citizens of Melbourne are already facing restrictions on water use, while authorities have constructed a large and expensive desalination plant to stand by in case of water shortages. Setting an example for others to follow, Melbourne Water chose Jets™ to reduce its own consumption.

Challenges
• Melbourne’s population increases by about 100,000 every year.
• Existing water sources are strained to the point where a desalination plant had to be built to secure the city’s water supply for periods of drought.
• Water restrictions are in place, limiting when and how water can be used.
• Recycled water is already used for non-drink purposes to reduce demand.
• Transporting and treating the city’s sewage requires a great deal of energy.

Jets™ solution
• Using just 1 litre of water per flush, Jets™ vacuum systems reduce the volumes of water and sewage associated with toilet flushing by up to 90%.
• As water consumption goes down, so does water and waste water charges.
• Vacuum toilets allow for easier source separation, so water can be recycled much easier and at a much lower cost than in traditional mixed systems.
• The city’s sewage transport and treatment costs will be reduced as more and more vacuum toilets are installed in place of traditional toilets.

Results
When a water and sewer authority such as Melbourne Water selects Jets™ vacuum toilets for its own employees, it demonstrates how sustainable sanitation is possible without sacrificing user comfort or system reliability.

Melbourne Water’s use of Jets™ vacuum toilets also speaks volumes about the water saving and sewage-reducing qualities of this system.

Furthermore, and perhaps most importantly, it encourages sustainable thinking by showing others that there are commercially available, practical ways of saving water, which will help secure the city’s water supply long term.

Jets™ vacuum toilets:
• 72x 50M model

Vacummarator™ units/pumps:
• 1x 130MBA unit
  (2x 65MBA pumps)
  Upgradeable to 195MBA with 3 pumps

Other details:
• Finished in 2011
• 6 Star Green Star Certificate
• Located in Docklands
• Currently 1,100 occupants
• System capacity: 1,200 people
• Ready for future upgrades

Melbourne Water’s new purpose-built HQ is part of Digital Harbour, an urban community within Melbourne’s Docklands built with sustainability in mind.

The Jets™ 130MBA vacuum unit used by Melbourne Water features two 65MBA pumps.

The available slot for a third pump (seen on the left) means it can be upgraded to a larger Jets™ 195MBA unit simply by installing another 65MBA pump in this slot.

This allows for more vacuum capacity to be added quickly and easily, should the toilet system ever need expanding.