

Melbourne Water - Melbourne, Australia



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

Jets™ vacuum toilets:

- 72x 50M model

Vacuamator™ 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

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.



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.