

101 Collins St is flush with water savings

Toilet Upgrade Case Study

Business Resource
Efficiency



Project Overview

PARTNER

101 Collins St

OBJECTIVE

To improve water efficiency within the building, reducing the volume of water used

HOW THE SAVINGS WERE ACHIEVED

Replacing single flush toilets with efficient dual-flush models

TECHNOLOGY UTILISED

6/3 litre dual-flush, low pressure solenoid activated valves and compatible pans

WATER SAVINGS

Over 14 million litres per year

TOTAL PROJECT COST

\$750,000

PROJECT FUNDING

\$100,000 from City West Water

PROJECT PAYBACK

- 17.6 years without City West Water funding
- 15.3 years with City West Water funding

PROJECT COMPLETED

August 2009.



101 Collins St is among the tallest buildings in Melbourne, with 83,000 square metres of office space accommodating approximately 4,000 office workers. Toilet flushing, tenants' use and wash basins previously accounted for 70% of the building's water use. Having already improved water efficiency in the building's cooling towers, management committed to doing the same with its toilets.

To achieve this, new water-efficient 6/3 litre dual-flush toilets were installed in the building's 44 tenanted floors. Although dual-flush toilets are becoming increasingly common in Melbourne's commercial and industrial buildings, a number of buildings

still have inefficient 11 litre single-flush or 11/6 litre dual-flush toilets. By retrofitting 6/3 litre toilets, 101 Collins St is now at the forefront of water-efficient commercial office spaces.



The water feature at 101 Collins St uses rainwater harvested from the roof of the building.

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Pressure ratio valves have been used to maintain the water pressure in all toilets, and computer-based monitoring of the system has been integrated into the maintenance program, making leaks easily identifiable and quick to fix. To complement this, 101 Collins St switched to a less fibrous toilet paper, which is more suitable for toilets with minimal flush volumes, and began a behavioural change campaign to alert tenants to the changes.

The toilet upgrade has not only improved water efficiency, but has helped contribute to the overall sustainability of the building's operations. Careful planning has ensured workplace disruptions were minimised by carrying out the toilet retrofits after hours and on weekends.

The project is anticipated to save a total of 14 million litres of drinking water each year,

helping the building to exceed the 2007 Melbourne water retailer industry best practice benchmark for commercial office water usage.*

* Industry best practices are taken from *Benchmarking Best Practice Water Use in the Commercial and Industrial Sector*, which is available at <http://www.citywestwater.com.au/business/3052.aspx>

For commercial property benchmarks refer to sector ANZSIC 6712.



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