

Value of Change

Re-imagining Resources

Through our sustainability strategy, 'This Changes Everything', Mirvac is committed to enhancing environmental outcomes through a process of re-imagining the way we use resources. The investment to reduce carbon emissions, water and waste is outlined below along with key strategies undertaken and financial savings achieved. Mirvac anticipate further savings in FY16 when the investments made this year are operational for the full reporting period.





Energy and Climate Change

Mirvac is committed to managing impacts of energy and carbon emissions through:

- Reducing carbon intensity by 20% (2018)
- Installing 1MW of renewable energy (2018)
- Being Net Positive (2030)

Actions in FY15 – Operation

- 23 Furzer St became the first major property in Australia to achieve a 6-star NABERS Energy rating.
- Office portfolio NABERS energy rating had increased to 5.1-stars at the end of FY15.
- Major electricity reductions were achieved across the following properties:
 - o Broadway Shopping Centre 673,653 KWh
 - o 275 Kent St 572,814 KWh
 - o 77 George St 564,278 KWh
 - o Como Centre 514,248 KWh
- Initiated major LED lighting upgrades across the Office and Retail portfolios including large projects at Birkenhead Point, Kawana and Rhodes shopping centres.
- Implemented the SkySpark analytics and diagnostic package across 14 properties.
- Continued the night audit program across the Office and Retail portfolios, identifying a range of simple efficiency opportunities.
- Developed briefs for an Integrated Communications Network and a Smart Building Technology Platform

to determine the architecture and requirements for future communication backbones and building management systems.

- Received the FMA's In-House Provider of FM Services award and the NSW Green Globes 10 Year award.

Performance

Mirvac Energy	FY12	FY13	FY14	FY15
Cost of Energy (\$)	\$15,474,069	\$16,822,806	\$19,580,625	\$16,652,908
Area (m ²)	977,423	872,225	1,046,766	972,906
Energy Efficiency Investment (\$)	\$1,789,424	\$1,234,926	\$2,595,548	\$1,879,678
Savings (\$)	\$886,906	\$283,951	\$909,160	\$594,009

Commentary on Performance

- The removal of the carbon pricing mechanism in July 2014 reduced electricity prices by approximately 10%.
- From FY14 to FY15 the average electricity rate across the Retail and Office portfolios fell through the commencement of a new energy supply contract in January 2015.
- In FY14 the Investment portfolio decreased by 73,860m² equating to a 7% reduction in area.



Mirvac is committed to managing impacts of water consumption through:

- Reducing water intensity by 15% (2018)
- Increasing water capture and reuse to 15% (2018)
- Being Net Positive (2030)

Actions in FY15 – Operation

- The Office portfolio maintained a 3.8-star portfolio NABERS water rating.
- Captured and reused 73,048KL of recycled water across eight properties.
- Rain water tanks totalling over 90KL were installed in the Rhodes Shopping Centre, the tanks offset 20,373KL of potable water usage.
- The rain and grey water system at 23 Furzer St delivered 22,389KL of recycled water.
- The portfolio's first Cooling Tower Telemetry system was installed at 275 Kent St, the system provides operational data on the water efficiency of the cooling towers.
- Continued to perform night audits across the portfolio which identified many simple operational savings.
- Installed more tenant water meters to exclude retailer water consumption.
- Daily monitoring of water usage via smart meter profiles.

Performance

Mirvac Waste	FY12	FY13	FY14	FY15
<i>Cost of Water (\$)</i>	\$4,215,554	\$4,010,787	\$4,903,442	\$4,478,331
<i>Area (m²)</i>	977,423	872,225	1,046,766	972,906
<i>Energy Efficiency Investment (\$)</i>	-	\$230,712	\$143,386	\$160,331
<i>Savings (\$)</i>	-	\$15,381	\$17,195	\$30,044

Commentary on Performance

- In FY14 the Investment portfolio decreased by 73,860m² equating to a 7% reduction in area
- The FY15 data includes a full year of water usage for 367 Collins, 477 Collins and the Harbourside Centre
- Harbourside is currently reporting whole of site usage
- Water use has been impacted by the installation of End of Trip facilities in several Office properties



Mirvac is committed to managing the impacts of waste through:

- Increasing recycling to 75% (2018)
- Implementing three closed loop projects (2018)
- Being Zero Waste (2030)

Actions in FY15 – Operation

- The Retail and Office portfolio achieved a combined 48% recycling rate in FY15, this exceeds the FY15 target by 3%.
- The Pulpmaster organic recycling system was operational at four properties, the system diverted 552.5 tonnes of organic waste from landfill across the four sites.
- In July 2015 Harbourside became Mirvac's first property to send landfill waste to an alternative waste treatment facility. The Suez facility reclaimed 85 tonnes of recyclable materials from the landfill waste in only one month.
- Continued to promote 'Bin Trim' assessments for our tenants/retailers-a NSW EPA funded program of waste audits for small to medium enterprises.
- Installed a smart compactor system at the Como Centre to separate the reporting of centre and hotel landfill waste data.
- Continued to enhance the collection and reporting of tenant recycling data to provide a more holistic view of building recycling performance.

- Engaged with our tenants and retailers to raise recycling awareness and enhance performance

Performance

Mirvac Waste	FY12	FY13	FY14	FY15
<i>Cost of waste (\$)</i>	\$2,578,134	\$2,606,542	\$3,633,796	\$4,340,874
<i>Savings in landfill tax/fees (\$)</i>	\$552,866	\$621,706	\$979,625	\$1,715,881
<i>Cost of Landfill fees (\$)</i>	\$1,645,394	\$1,836,751	\$2,256,823	\$2,628,065
<i>Income from sale of waste (\$)</i>	-	-	-	-

Commentary on Performance

- Waste costs have been impacted by increases in landfill taxes/fees-the table below details the change in fees from FY11 to FY15.

State	FY11	FY12	FY13	FY14	FY15
NSW	\$195	\$224	\$266	\$290	\$310
VIC	\$81	\$110	\$133	\$146	\$152
QLD	\$66	\$103	\$87	\$89	\$91
WA	\$110	\$105	\$121	\$123	\$126