

The Value of Change

Re-imagining Resources

Through our sustainability strategy: *This Changes Everything*, Mirvac is committed to enhancing environmental outcomes through the process of re-imagining the way we use resources. The investment in energy, water and waste initiatives are outlined below along with key strategies undertaken and financial savings achieved. Mirvac anticipate further savings in FY15 when the investments made this year are operational for the full reporting period.



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

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

Actions in FY14 – Operation

This financial year we have invested in energy efficiency and energy generation through the following key initiatives:

- Installation commenced on an 80KW solar PV system at 23 Furzer Street, ACT
- Implemented LED lighting upgrades across the office and retail portfolios including large projects at Broadway, Moonee Ponds and the Como Centre
- Performed night audits across the office and retail portfolios identifying a range of simple efficiency opportunities
- Implemented 2 Chiller Plant Optimisation projects at 10-20 Bond St and 23 Furzer Street to improve the

energy efficiency of the chilled water plant

- Developed a set of Design Guidelines to feedback operational experience into the design process
- Office portfolio average NABERS Energy rating increased to 4.9 Stars
- Delivered on Mirvac's NABERS Commitment Agreement at 20 Bond St, achieving a 5 Star Energy rating in December 2013
- 8 Chifley became operational and entered the building tuning phase
- Received the FMA's Contribution to Energy Efficiency Award for portfolio energy reductions and the PCA Sustainable Development Existing Buildings award for 10-20 Bond St energy performance

Performance

Over the past two years Mirvac has invested \$5,619,898 in energy efficiency and carbon reduction resulting in financial savings of \$2,080,017. We anticipate savings to increase in FY15 as our \$2.5m investments from FY14, such as the 80kW solar PV array at 23, Furzer Street, have a full year of operation.

Mirvac Energy	FY12	FY13	FY14
Cost of Energy (\$)	\$15,474,069	\$16,822,806	\$19,580,625
Energy Efficiency Investment (\$)	\$1,789,424	\$1,234,926	\$2,595,548
Savings (\$)	\$886,906	\$283,951	\$909,160

Commentary on Performance

- From FY12 to FY14 the average electricity rate across the investment portfolio increased by 28%
- The introduction of a carbon pricing mechanism on the 1st July 2012 increased electricity prices by approximately 10%
- Extended operating periods by Target and other major retailers have impacted operating hours at several retail centres including St Marys and Broadway
- The sale of several properties to the Blackstone Group occurred in early July 2014 and did not impact the FY14 energy costs
- Overall investment portfolio area increased - for details see Table 2 FY14 Area Changes



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

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

Actions in FY14 – Operation

This year we have invested in water efficiency and non-potable water capture through the following key initiatives:

- Expanded the metering and data collection of non-potable water capture and reuse
- Performed night audits across the portfolio which identified many simple operational savings including Cooling Tower ball float issues, leaking fixtures and faulty sensors
- Rainwater tanks totalling over 90,000L were installed in the Rhodes shopping centre
- Installed new tenant water meters to exclude the water consumption of high use retailers from base building usage
- Daily monitoring of water usage via smart meter profiles

Performance

Mirvac Water	FY12	FY13	FY14
<i>Cost of Water (\$)</i>	\$4,215,554	\$4,010,787	\$4,903,442
<i>Water Efficiency Investment (\$)</i>	-	\$230,712	\$143,386
<i>Savings (\$)</i>	-	\$15,381	\$17,195

Commentary on Performance

- Office data has been impacted by a persistent water leak and rain water tank maintenance at One Darling Island
- Water use has been impacted by the installation of additional End of Trip facilities, longer operating hours in retail centres and the retailer practice of hosing air cooled heat rejection systems during summer periods
- The FY13 figures were impacted by the flooding at Hinkler Shopping Centre
- Government taxes are included in the water charges in the ACT and QLD
- Overall investment portfolio area increased - for details see Table 2 FY14 Area Changes



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

- Increase recycling to 75% (2018)
- Implement three closed loop projects (2018)
- Be Zero waste (2030)

Actions in FY14 – Operation

This year we have invested in resource recovery through the following key initiatives:

- Mirvac Facility Management recruited a dedicated Resource Recovery Manager
- The retail and office portfolios commenced a program of waste audits
- Trialled a new organics processing technology at Broadway and planning to roll out the technology to several other properties
- Promoted 'Bin Trim' assessments for our Tenants / Retailers - a NSW EPA funded program of waste audits for small to medium enterprises
- Enhanced the collection and reporting of tenant recycling data to provide a more holistic view of building recycling performance
- Engaging with our tenants and retailers to raise recycling awareness and enhance performance

Performance

Diverting waste from landfill has resulted in savings of \$979,625 this financial year alone. With the trend of landfill taxes/fees rising this is a significant area of opportunity for Mirvac to reduce operating costs while working towards the business' Zero Waste 2030 commitment.

Mirvac Waste	FY12	FY13	FY14
<i>Cost of waste (\$)</i>	\$2,578,134	\$2,606,542	\$3,633,796
<i>Savings in landfill tax/fees (\$)</i>	\$552,866	\$621,706	\$979,625
<i>Cost of Landfill fees (\$)</i>	\$1,645,394	\$1,836,751	\$2,256,823

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

- Costs impacted by carbon pricing of around \$25 per tonne of CO₂, the costs are calculated on a pass through basis costs by the Waste industry
- Costs impacted by expansion in the portfolio size especially in NSW with the highest land fill costs

Changes in Portfolio Area (Not Normalised)

Over the past two years Mirvac's overall area of assets has increased by 69,343m². The changes over this financial year are tabled in detail below to show assets added to the portfolio, those divested and also areas added through extension of three of our retail centres.

Mirvac Area	FY12	FY13	FY14
Office & Industrial Area (m ²)	529,852	500,859	638,314
Retail Area (m ²)	436,617	371,366	407,221
Total area (m ²)	977,423	872,225	1,046,766

Table 1 Non-normalised area changes FY12-14

FY14 Area Changes

The following tables show the properties that were purchased, divested or extended in area over FY14.

Property	Building Type	State	NLA/GLA (m²)	Status
8 Chifley Square	Office	NSW	19,350	Purchased
210 George	Office	NSW	4,758	Purchased
220 George	Office	NSW	8,916	Purchased
37 Pitt	Office	NSW	12,264	Purchased
51 Pitt	Office	NSW	4,990	Purchased
6-8 Underwood	Office	NSW	3,236	Purchased
90 Collins	Office	VIC	21,243	Purchased
367 Collins	Office	VIC	37,618	Purchased
477 Collins	Office	VIC	12,020	Purchased
77 St George Terrace	Office	WA	27,853	Purchased
Harbourside	Retail	NSW	20,941	Purchased
Orange	Retail	NSW	17,853	Divested
Gippsland	Retail	VIC	22,755	Divested
Logan	Retail	QLD	27,026	Divested
Kawana Shoppingworld	Retail	NSW	8,268	Extension (construction)
Orion Springfield	Retail	VIC	4,917	Extension (construction)
Stanhope Village	Retail	QLD	2,213	Extension (construction)

Table 2 FY14 Area Changes