THE VALUE OF CHANGE

Over the four years of *This Changes Everything,* we've used this document to outline the strategies for and financial savings from our reimagining resources commitments. We recognise that the value of sustainability to Mirvac extends far beyond what we disclose for energy, carbon, water and waste savings. In this year's annual report, we flagged that we will be refreshing our sustainability strategy. A key part of this review will be ensuring that we remain outcome focused with metrics that demonstrate how we are making a positive impact in areas that matter most to our business and stakeholders.

REIMAGINING RESOURCES

Mirvac has commitments within *This Changes Everything* to enhance environmental outcomes through a process of reimagining the way we use our resources; energy, water and materials.

Climate Change and Energy

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)

Having achieved our short-term targets, we are shifting our focus to being net positive in just over a decade. Our efforts to reduce energy and carbon are also paying dividends with rising energy prices and supply issues in several key markets. Initiatives such as Mirvac Energy and the House with No Bills will be integral in us continuing to address energy cost, security, uncertainty and affordability.

We are also undertaking a climate risk review to ensure we are addressing the climate related risks and opportunities that are material to Mirvac.

Actions in FY17 – Operation

- 23 Furzer St, Woden and Bay Centre, Sydney retained 6 star NABERS Energy ratings.
- The Office portfolio maintained a NABERS average portfolio energy rating of 5.1 stars.
- 275 Kent Street, Sydney and 23 Furzer Street, Woden maintained 6 star Green Star Performance ratings.
- Mirvac Energy installed a 1MW renewable energy system at Orion Springfield Central and a 100kW system at One Darling Island resulting in the 1MW renewable energy short term target being achieved one year ahead of schedule.
- Retail energy usage was impacted by increased trading hours.
- Finalist at 3 prestigious sustainability awards:
    - CIBSE – Best International Project category;
    - Energy Efficiency Council – Highly Commended in the Best Commercial Building Energy Efficiency Project category; and
    - NSW Green Globe Awards.
- Climate change policy adopted.

Performance

Energy	FY12	FY13	FY14	FY15	FY16	FY17
Cost of electricity ($)	$15,474,069	$16,822,806	$19,580,625	$16,652,908	$15,447,658	$16,362,527
Area (m^2)	977,423	872,225	1,046,766	972,906	984,409	1,047,363
Energy efficiency investment ($)	$1,789,424	$1,234,926	$2,595,548	$1,879,678	$2,648,268	$2,842,997
Forecast savings from efficiency projects ($)	$886,906	$283,951	$909,160	$594,009	$598,969	$599,576

Commentary on Performance

- Calculated savings are impacted by electricity prices, energy intensity and operational control area.
- Electricity costs increased significantly in Queensland during FY17 and are expected to increase across the portfolio in FY18.
- Time weighted area (NLA or GLA) has been utilised for new or purchased properties to represent the time in the portfolio for FY17.
- NLA and GLA measurements have been reviewed to ensure reported areas correspond to the areas of operational control and energy consumption.
- 2 Riverside Quay in Melbourne and the Tram Sheds Centre both became operational in FY16.

WATER

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)

Water remains one of our toughest challenges. Having achieved our water intensity reduction target in FY15, we are tracking at 7% water capture and reuse, about half of our 15% short-term objective.

Actions in FY17 – Operation

- The Office portfolio achieved a 4.1 star portfolio NABERS Water rating.
- The capture and reuse of recycled water increased to 71,970kL across 13 properties.
- The rain water collection system at Orion Springfield Central was recommissioned to enhance capture and reuse of non-potable water.
- Following optimisation of the existing rain water collection system and implementation of condensate capture at 275 Kent Street, Sydney the amount of recycled water increased from 13,969kL in FY16 to 32,357kL in FY17.
- A new rain water collection system became operational at the Tram Sheds Centre. The system captured 1,478kL of rain water in FY17.
- Sirius, 23 Furzer Street, Woden, ACT achieved a 5.5 star NABERS water rating.
- Our facility management teams continues to conduct night audits and monitor daily water usage via smart meter profiles to help optimise operational water.

Performance

Water	FY12	FY13	FY14	FY15	FY16	FY17
Cost of water ($)	$4,215,554	$4,010,787	$4,903,442	$4,478,331	$4,565,543	$4,380,476
Area (m^2)	977,423	872,225	1,046,766	972,906	984,409	1,047,363
Water efficiency investment ($)	-	$230,712	$143,386	$160,331	$226,090	$440,328
Forecast savings from efficiency projects ($)	-	$15,381	$17,195	$30,044	$58,149	$105,188

Commentary on Performance

- Retail water use has been negatively impacted by longer operating hours associated with dining precincts and late night trading.
- Additional retailer meters have enabled greater exclusion of non-base building water consumption.
- The installation of end of trip facilities continues to adversely impact the water use of several office properties.

WASTE

Mirvac is committed to managing impacts of waste through:

- Increasing recycling to 75% (2018)
- Implementing three closed loop projects (2018)
- Being net zero waste (2030)

Through concerted efforts and setting a target of 95% for all new development projects, our construction business achieved a 95% recycling rate.

Actions in FY17 – Operation

- The Retail and Office portfolios exceeded the FY17 recycling target of 65%.
- In FY17, the Suez Alternative Waste Treatment facility meant that 4,883 tonnes of recyclable materials were diverted from the landfill waste.
- Rolling out the Scanline cooking oil collection service delivered revenue of $45,641.
- Working with the Mates on the Move social enterprise across 5 Sydney office sites we diverted 11.16 tonnes of paper towels and coffee cups from landfill. The materials are transformed into a process engineered fuel by Suez and used to offset fossil fuel consumption in Malaysia.
- Considerable effort has gone in to identifying and implementing closed loop projects with three projects in development or underway across the business.

Performance

Waste	FY12	FY13	FY14	FY15	FY16	FY17
Cost of waste ($)	$2,578,134	$2,606,542	$3,633,796	$4,340,874	$5,420,860	$4,936,533
Savings in landfill tax &fees ($)	$552,866	$621,706	$979,625	$1,715,881	$1,947,459	$2,289,502
Cost of landfill fees ($)	$1,645,394	$1,836,751	$2,256,823	$2,628,065	$2,118,108	$3,124,048
Income from sale of waste ($)	-	-	-	-	$25,624	$177,479

Commentary on Performance

- Landfill taxes and fees have been calculated as a 5% increase on the FY16 figures.
- Income from the sale of waste increased through the inclusion of cardboard collection rebates and a portfolio implementation of used cooking oil collection.