

Environmental Data Pack

FY19

Background notes

As a property owner and developer, acquisitions, divestments and development activity within a given year can significantly impact our environmental performance. The table below provides an overview of the activity profile for each of our businesses and how this affects our environmental data.

	ACTIVITY PROFILE	ENERGY AND EMISSIONS	NATURAL RESOURCES
Group operations	Internal corporate operations.	<p>Unless there are significant changes to the tenancies that we operate from, minor fluctuations generally reflect external factors beyond our control.</p> <p>Scope 1: Vehicle fleet fuel.</p> <p>Scope 2: Purchased electricity.</p> <p>Scope 3: Hire car, airline and rental car travel.</p>	<p>The water, waste and other natural resources are typically managed by the base building that we are tenancing. Where we are a tenant within our own building, these resources are reported under the base building.</p>
Commercial Property	Operating our Retail Town Centre, Workplace and Logistics assets.	<p>Unless there are significant changes to our portfolio, or key infrastructure upgrades/installations, changes generally reflect energy efficiency programs and initiatives.</p> <p>Scope 1: Gas consumption, refrigerants.</p> <p>Scope 2: Purchased electricity.</p> <p>Scope 3: Transmission losses, operational waste.</p>	<p>Unless there are significant changes to our portfolio, changes reflect water efficiency programs and initiatives, tenancy mix, water leakages, or changes to asset management arrangements.</p> <p>Water: Potable water consumption.</p> <p>Waste: Operational waste, development construction waste.</p>
Communities	Development of our projects and communities, predominantly undertaken by our residential and retirement living community contractors.	<p>Increased civil works activity has a direct correlation with increased energy and emissions. In periods where we are actively developing our assets, our emissions profile is higher.</p> <p>Scope 1: Emissions from gas and fuel consumption and explosives reported by our contractors, and our direct gas consumption.</p> <p>Scope 2: Emissions from electricity consumption reported by our contractors, and our purchased electricity.</p> <p>Scope 3: Transmission losses.</p>	<p>Increased civil works activity has a direct correlation with increased water consumption. In periods where we are actively developing our assets, our water consumption, and particularly that of our residential contractors, is higher.</p> <p>Increased finishing works (landscaping and upgrades in our retirement living communities) also contribute to increased water consumption, and retirement living contractors generally undertake these works.</p> <p>Water: Potable and non-potable water consumption reported by our contractors, and our direct water consumption.</p> <p>Waste: Waste generation reported by our contractors.</p> <p>Biodiversity metrics vary and reflect the specific characteristics of our residential community projects.</p>

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	ACTIVITY PROFILE	ENERGY AND EMISSIONS	NATURAL RESOURCES
Communities	Operating our retirement living communities.	<p>Unless there are significant changes to our portfolio (e.g. the acquisition of Aevum in FY11 which nearly doubled the size of our Retirement Living business) annual changes generally reflect energy efficiency programs and initiatives, climatic conditions (i.e. milder temperatures reduce energy demand), unit vacancy and development villages opening to residents.</p> <p>Scope 1: Our direct gas consumption (can include our residents' consumption where a village is not sub-metered).</p> <p>Scope 2: Our direct consumption of purchased electricity (can include our residents' consumption where a village is not sub-metered).</p> <p>Scope 3: Transmission losses.</p>	<p>Unless there are significant changes to our portfolio (e.g. the acquisition of Aevum in FY11 which nearly doubled the size of our Retirement Living business) annual changes reflect water efficiency programs and initiatives and development villages opening to residents.</p> <p>Water: Water consumption.</p>

Environmental impacts from transport are not considered material for our organisation. While we report on Scope 3 emissions as it relates to air and ground transport during business hours, we have excluded employee transport to work due to data reporting challenges. Similarly, we have excluded our supply chain's movement of goods and materials on our behalf.

Carbon and energy

Carbon and energy data within this document is to be read in conjunction with our [Carbon and Energy Deep Dive](#) available on our [website](#).

Boundary and methodology

We report our Scope 1 and Scope 2 emissions according to our operational control boundary under the National Greenhouse and Energy Reporting Act 2007 (NGER Act). We voluntarily report select Scope 3 emissions in accordance with the GHG Protocol Corporate Standard. All of our operations are based in Australia.

SCOPE	BOUNDARY
Scope 1	<p>Direct emissions, i.e. emissions from fuels that are combusted on site (including natural gas, diesel and petrol from fleet) as well as refrigerant leakage.</p> <p>Direct emissions reported by contractors where we have operational control (typically residential community projects). Contractors are required to supply their gas and fuel consumption data as part of monthly reporting.</p> <p>Emissions from gas consumption across the Retail Town Centre, Workplace, Logistics, Residential and Retirement Living assets for which we have operational control. For those assets that have missing invoices estimates are provided.</p> <p>Tenant gas usage is not included except where we are the tenant.</p>
Scope 2	<p>Indirect emissions from the consumption of electricity only.</p> <p>Indirect emissions reported by contractors where we have operational control (typically residential community projects). Contractors are required to supply their electricity consumption data as part of monthly reporting.</p> <p>Emissions from base building electricity across the Retail Town Centre, Workplace, Logistics, Residential and Retirement Living assets for which we have operational control. For those assets that have missing invoices estimates are provided.</p> <p>Tenant electricity usage is not included except where we are the tenant.</p>
Scope 3	<p>Other indirect emissions, including hire cars, rental vehicles and airline travel, transmission and production losses from purchased electricity, gas and fleet fuel and operational waste from our Commercial Property portfolio.</p>

Notes:

- Development contractor resource and energy data is provided to us by third party contractors in accordance with NGER Act reporting requirements.
- Logistics data is predominantly related to vacant spaces or minimal external and internal common area lighting. Due to the high volatility of this energy and water consumption, setting meaningful targets becomes difficult. Additionally, there are currently no industry standards and therefore we have decided not to set targets for our Logistics portfolio.

- We have embedded networks within our assets, and the usage of our residents and tenants is removed where the usage is outside of our Operational Control under the NGER Act. In FY19, 24 Retail Town Centres, two Workplace assets, two Logistics assets and 21 retirement living communities have embedded networks.
- In FY20, we will seek to review our approach to carbon accounting giving consideration to our large scale solar projects noting alignment to the GHG Protocol.

Emissions

TOTAL GREENHOUSE GAS EMISSIONS (tCO₂-e)

	FY19	FY18	FY17	FY16	FY15
Stockland group total Scope 1	24,230	25,453	26,884	35,036	26,368
Stockland group total Scope 2	70,545	82,591	87,860	89,881	97,763
Stockland group total Scope 1+2 emissions	94,774	108,044	114,743	124,917	124,131

TOTAL SCOPE 1 EMISSIONS (tCO₂-e)

	FY19	FY18	FY17	FY16	FY15
Workplace and Business Parks base building gas	1,231 ¹	1,160	1,010	1,080	999
Logistics centres gas	-	-	-	-	-
Retail Town Centres gas	1,477	1,487	1,451	398 ²	185
Vehicle fleet fuel	86	88	84	86	84
Refrigerants leaked ³	1,149	3,203	3,224	3,091	2,783
Residential sites fuel & gas ⁴	100	69	52	10	15
Residential contractors fuel and gas	19,498	18,666	20,278 ⁵	29,525 ⁶	21,626
Retirement living communities fuel & gas ⁷	688	780	745	487	591
Retirement living contractors fuel, gas	-	- ⁸	393	360	86
Total Scope 1 emissions	24,230	25,453	26,884	35,036	26,368

¹ Increase due to major heating issues at Optus causing the boilers to operate longer and harder

² Gas increase due to the removal of electric duct heaters to efficient central boiler heating system.

³ Excludes Refrigerant R-22 in line with NGERs reporting protocol.

⁴ FY17 onwards includes fuel (for residential site office usage), whereas previous years only consumed gas.

⁵ Construction activities across master planned residential communities transition from civil works in FY16 to residential lots in FY17.

⁶ Figures reflect our activity profile: continuing increased development activity on existing and new sites.

⁷ FY19 onwards includes fuel (LPG), whereas previous years only consumed gas.

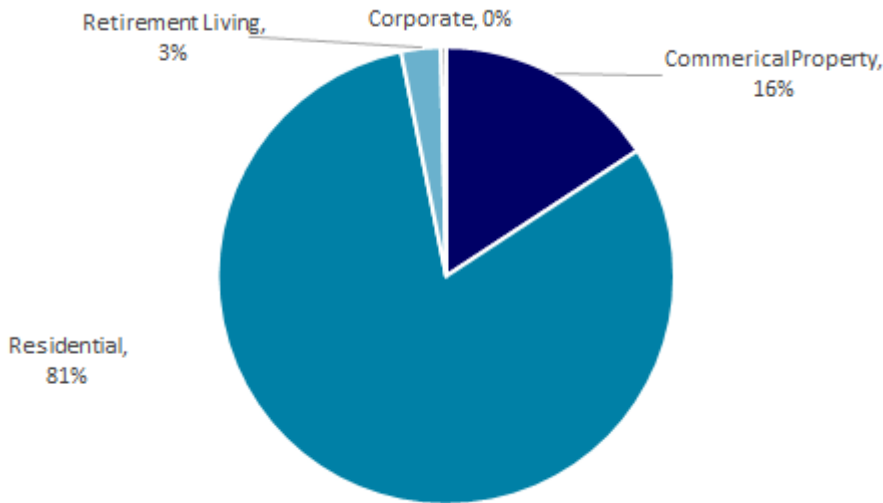
⁸ No development works in our Retirement Living business were considered to be within our operational control boundary from FY18.



Scope 1 emissions by business unit

Communities (Residential) constitutes the largest proportion of our Scope 1 emissions due to contractor construction activity across our developments.

SCOPE 1 EMISSIONS BY BUSINESS UNIT



TOTAL SCOPE 2 EMISSIONS (tCO₂-e)

	FY19	FY18	FY17	FY16	FY15
Corporate tenancies electricity	1,409	1,421	1,418	1,353	1,372
Workplace and Business Parks base building electricity	16,513	17,603	18,350	19,657	22,981
Logistics centres electricity	1,771	4,254	4,321	1,291	2,048
Retail Town Centres electricity	43,250	51,032	54,327	58,839	63,134 ⁹
Residential sites electricity	1,532	1,413	1,413	1,515	1,573
Residential contractors electricity	35 ¹⁰	84	147	299	315
Retirement living communities electricity	6,035	6,785	7,874	6,918	6,323
Retirement living contractors electricity	-	- ¹¹	8	8	16
Total Scope 2 emissions	70,545	82,592¹²	87,860	89,881	97,763

⁹ Retail Town Centre emissions increases in FY15 because of new acquisitions and centre expansions.

¹⁰ Multiple civil works site offices established prior to availability of electricity grid connection.

¹¹ No development works in our Retirement Living business were considered to be within our operational control boundary from FY18.

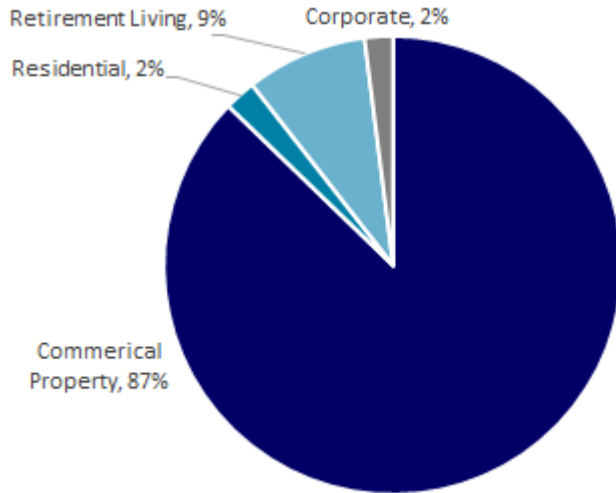
¹² This figure (82,592) varies from the Scope 2 emissions figure provided on page 3 (82,591) because of rounding in this table.



Scope 2 emissions by business unit

Commercial Property constitutes our largest proportion of Scope 2 emissions and remains the focus of our strategic energy efficiency initiatives. See our [Carbon and Energy Deep Dive](#) for further information on initiatives that contributed to our FY19 performance.

SCOPE 2 EMISSIONS BY BUSINESS UNIT



TOTAL SCOPE 3 (tCO₂-e)

	FY19	FY18	FY17	FY16	FY15
Total transmission and production losses (from purchased electricity, gas and fleet fuel)	10,469	13,216	14,675	14,782	17,255
Waste disposal ¹³	13,803	14,892	11,990	20,571	NA
Vehicle hire and hire car travel	38	64	35	42	51
Airline travel	3,262	5,694	4,415	4,233	3,695
Total scope 3 emissions	27,572	33,866	31,115	39,628	21,002

¹³ From FY16 we expanded our boundary to include scope 3 emissions from waste generated at our Commercial Property assets.

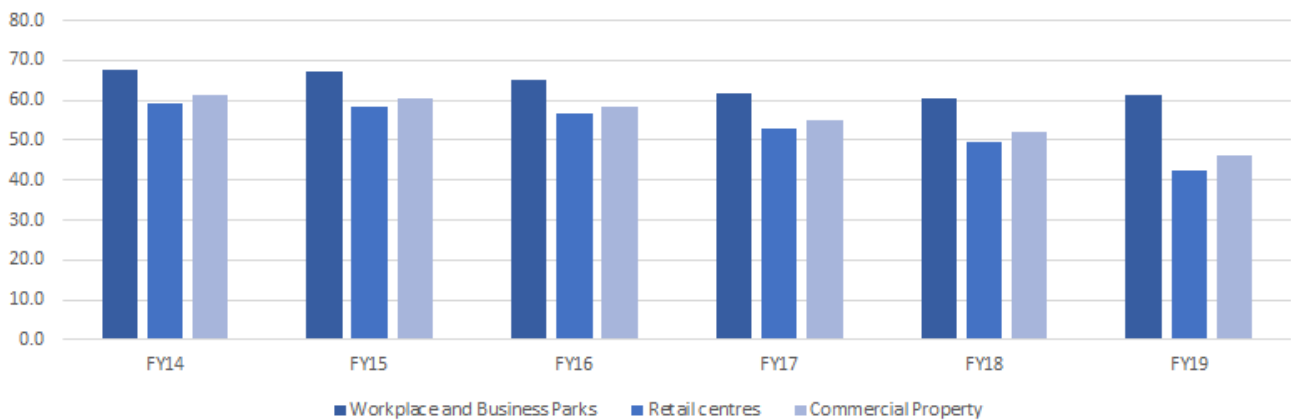
Emissions intensity

We track our emissions on an intensity basis as this helps represent the greenhouse gas emissions from our Commercial Property portfolio in a way that is isolated from the increases and decreases in emissions due to investments, divestments and vacancies. Intensity metrics are based on the standard measures of net lettable area (NLA) or gross lettable area (GLA) in square metres (where appropriate for each asset class). Emissions intensities only apply to stable operating assets such as the Commercial Property portfolio.

GREENHOUSE GAS EMISSIONS INTENSITY (kgCO₂-e/m²)¹⁴

	FY19	FY18	FY17	FY16	FY15
Workplace and Business Parks base buildings	61.18	60.41	61.7	64.98	67.32
Floor area (NLA) of buildings in intensity metric (m ²)	290,083	310,586	313,830	320,943 ¹⁵	356,060
% portfolio in intensity metric	100%	100%	100%	100%	100%
Retail Town Centres base buildings	42.25	49.54	52.92	56.58	58.32
Floor area (GLA) of buildings in intensity metric (m ²)	1,057,605	1,056,205	1,054,234	1,047,054	1,014,045
% portfolio in intensity metric	100%	100%	100%	100%	100%
Commercial Property¹⁶	46.32	52.00	54.93	58.55	60.66
Floor area of buildings in intensity metric (m ²)	1,347,716	1,366,882	1,368,011	1,366,279	1,370,119
% portfolio in intensity metric	100%	100%	100%	100%	100%

GREENHOUSE GAS EMISSIONS INTENSITY (kgCO₂-e/m²)



EMISSIONS INTENSITY REDUCTIONS

	ANNUAL INTENSITY CHANGE (%)				
	FY19	FY18	FY17	FY16	FY15
Workplace and Business Parks	1%	-2%	-5%	-4%	0%
Retail Town Centres	-14.7%	-6%	-6%	-3%	-2%
Commercial Property	-10.9%	-5%	-6%	-4%	-1%

¹⁴ Based on scope 1 and 2 emissions, excluding all refrigerants.

¹⁵ Area-weighted intensity combination of Workplace and Business Parks assets.

¹⁶ Combined Workplace, Business Parks, and Retail Town Centres.

Other emissions

Stockland's emissions of ozone-depleting substances are minimal and not considered material for reporting.

NOx and SOx are material for property companies that operate key generation plants including trigeneration. Stockland has Scope 2 exposure to trigeneration, and is not in control of this plant, so we do not report emissions from generation, as per other energy generation.

Energy consumption

This section details the consumption of specific energy types across the three businesses and group operations. These are the sources of the greenhouse gas emissions reported under scope 1 and 2.

Electricity

PURCHASED ELECTRICITY (kWh)

	FY19	FY18	FY17	FY16	FY15
Corporate tenancies	1,669,975	1,665,878	1,648,037	1,556,157	1,538,236
Workplace and Business Parks base buildings	19,246,269	21,644,622	22,255,609	24,120,329	27,759,472
Logistics centres	2,186,021	5,189,496	5,129,175	1,577,286	2,416,170
Retail Town Centres	52,039,389	60,791,065	64,878,522	69,088,256	72,666,207
Residential sites	1,828,237	1,695,059	1,729,655	1,824,740	1,841,916
Residential contractors	42,228	102,385	180,211	331,110	437,697
Retirement living communities	7,020,219	7,887,931	8,876,288	7,859,963	6,888,485 ¹⁷
Retirement living contractors	-	¹⁸	7,438	6,962	16,264
Total	84,032,337	98,976,436	103,242,404	106,364,804	113,564,446

PURCHASED ELECTRICITY INTENSITY (kWh/m²)

	FY19	FY18	FY17	FY16	FY15
Workplace and Business Parks base buildings	70.91	69.68	70.96	75.77	77.91
Floor area (NLA) of buildings in intensity metric (m ²) ¹⁹	289,996	310,658	313,700	320,097	356,118
% of portfolio covered in intensity metric	100%	100%	100%	100%	100%
Retail Town Centres	49.15	57.32	61.79	65.98	66.27
Floor area (GLA) of buildings in intensity metric (m ²)	1,057,562	1,056,145	1,050,411	1,047,054	1,014,074
% of portfolio covered in intensity metric	100%	100%	100%	100%	100%
Commercial Property²⁰	53.83	60.13	63.89	68.26	69.30
Floor area of buildings in intensity metric (m ²)	1,347,613	1,366,791	1,364,156	1,365,954	1,370,177
% of portfolio covered in intensity metric	100%	100%	100%	100%	100%

¹⁷ Retirement living data source improvements were implemented in FY15. This included drawing electricity consumption data directly from our embedded electricity networks which permits us to separate resident use from Stockland use at villages where we have embedded networks. This has resulted in a noticeable reduction in reportable energy use for the Retirement Living business. In addition, the retirement living asset divestments and exit from the Aged Care business in FY15 accounted for a further 24 per cent drop in electricity consumed compared to FY14.

¹⁸ No development works in our Retirement Living business were considered to be within our operational control boundary from FY18.

¹⁹ NLA – Net Lettable Area; GLA – Gross Lettable Area.

²⁰ Area weighted intensity combination of Workplace, Business Parks, and Retail Town Centre assets.

PURCHASED ELECTRICITY INTENSITY REDUCTIONS

	ANNUAL INTENSITY CHANGE (%)				
	FY19	FY18	FY17	FY16	FY15
Workplace and Business Parks	2%	-2%	-6%	-3%	0%
Retail Town Centres	-14%	-7%	-6%	0%	0%
Commercial Property ²¹	-10%	-6%	-6%	-2%	0%

RENEWABLES GENERATION

	FY19	FY18	FY17	FY16	FY15
Solar generation (kWh) ²²	12,958,224	3,274,463	2,387,168	1,940,689	292,124
Solar capacity installed (at period end) (kW)	16,400	4,360	2,260	1,360	1,360

Fuels
GAS CONSUMPTION (MJ)

	FY19	FY18	FY17	FY16	FY15
Workplace and Business Parks base buildings	23,893,430	22,503,346	19,605,661	20,949,926	19,456,794
Logistics centres	0	0	0	0	0
Retail Town Centres	28,656,262	28,850,605	28,164,870 ²³	7,726,710	3,607,633
Residential sites	194,936	184,905	231,633	196,216	261,852
Residential contractors	0	0	0	0	200
Retirement living communities ²⁴	13,291,200	15,137,631	14,448,049 ²⁵	9,451,522	7,177,497
Retirement living contractors	0	0	0	0	0
Total	66,035,827	66,676,487	62,450,212	38,324,374	30,503,976

FUEL CONSUMPTION²⁶

	FY19	FY18	FY17	FY16	FY15
Diesel (L)	7,119,975	6,770,937	7,356,552	10,344,491	7,714,541
Bio diesel (L)	-	2,395	2,070	525,463	566,473
Petrol (L)	102,157	133,092	129,554	169,636	257,135
Ethanol (L)	7,789	8,636	8,451	4,689	2,102
LPG (L)	642	1,375	246	556	26
Oil (L)	25,938	37,291	42,802	71,973	94,981
Grease (kg)	16,350	17,386	32,592	66,070	65,703

²¹ Area-weighted intensity combination of Workplace, Business Parks, and Retail Town Centre assets.

²² Figures relate to total electricity generation from photovoltaic power within financial year.

²³ Increase due to additional meters being found during embedded network assurance exercise.

²⁴ FY19 onwards includes fuel (LPG), whereas previous years only consumed gas.

²⁵ Increase in retirement living village gas consumption primarily associated with villages transitioning from externally managed to internally managed and villages under development transitioning to operational facilities.

²⁶ Comprises corporate fleet fuel, and residential and retirement living developments contractor fuel consumption (where in Stockland operational control).

Biodiversity

Biodiversity data presented in this section is to be read in conjunction with our Biodiversity Deep Dive available on our [website](#).

BIODIVERSITY IMPACT AND MANAGEMENT

	FY19	FY18	FY17	FY16	FY15
PORTFOLIO					
Total projects with masterplan approval ²⁷	29	30	36	31	39
Total land area (ha)	8,751	9,088	10,312	8,637	12,302
BIODIVERSITY IMPACT					
Total projects with areas of significant biodiversity value ²⁸	20	20	25	25	30
Total land area of significant biodiversity value (ha)	1,525	1,410	1,972	1,332	1,736
Total land area of significant biodiversity value to be cleared (ha)	749	576	587	425	63
Total land area to be conserved for biodiversity, including onsite and offsite (ha)	2,410	2,202	1,972	1,750	NA
BIODIVERSITY MANAGEMENT					
Total projects with areas of significant biodiversity value that have a biodiversity management plan	80%	85%	48%	58% ²⁹	100%
Total land area to be regenerated, revegetated, restored or rehabilitated on ground or through offsets (ha)	1,998	1,671	1,567	1,641	1,581 ³⁰
Total projects working with community and non-governmental organisations	2	3	3	6	5

²⁷ Our biodiversity results are representative of our residential projects that have received masterplan approval and/or were active developments as at 30 June 2019.

²⁸ As defined by the relevant state or federal legislation. All of our projects that with significant biodiversity on site are required to develop a biodiversity management plan (see [Biodiversity Deep Dive](#)).

²⁹ This has decreased from FY15 as the previous year's reporting included a commitment to prepare a biodiversity management plan. Since FY15 we have reported on the percentage of those projects that have actually prepared a biodiversity management plan as at 30 June 2018. Note that all of our projects without a biodiversity management plan have made a commitment to develop one and will do so at the appropriate phase of the development.

³⁰ In FY15, this section has been expanded to include land onsite and offsite offsets as this is the key method in balancing the provision of ecological habitats with development activities.

PROJECTS WITH AREAS OF SIGNIFICANT BIODIVERSITY VALUE

The below table shows residential communities projects with areas of significant biodiversity value that have an approved masterplan. The change in biodiversity value refers to projects that have been assessed under our biodiversity calculator since it was developed in FY15.

REGION	DEVELOPMENT	LOCATION	TOTAL LAND (HA)	TOTAL BIODIVERSITY AREA APPROX (HA)	CHANGE IN BIODIVERSITY VALUE ³¹
Victoria	Allura	Truganina	140	17.5	
	Cloverton	Kalkallo	1141	300	+18.05
	Edgebrook	Clyde	65.118	1	+8.62
	Grandview	Truganina	138	17.4	
	Highlands	Craigieburn	978.4	43.9	
	Minta	Berwick	116.44	9.82	+3.47
	Mt Atkinson	Truganina	319.4	38.66	+4.11
Western Australia	Amberton	Eglington	198	20	
	Calleya	Banjup	145	13.73	+3.2
	Sienna Wood	Perth	330	7.4	
	Vale (WA)	Aveley	541	50	
New South Wales	Altrove	Sydney	50	1	+2.7
	Willowdale	Leppington	350	100	
Queensland	Augustine Heights	Augustine Heights	183	47	
	Bokarina Beach	Sunshine Coast	30	5	+3.68
	Aura	Caloundra	1595	300	
	Foreshore	Coomera	116	51	+7.02
	Kalina	Springfield	38	38	
	North Shore	Burdell	1031	275	
	Pallara	Brisbane	122.462	32	+27.59

³¹ The biodiversity calculator is only used in projects that are approved from FY15. Projects without a change in biodiversity value were approved prior to FY15.

Water management and quality

Water data in this section is to be read in conjunction with our Water Management Deep Dive available on our [website](#).

Boundary and methodology

We report our water consumption according to our operational control boundary under the NGER Act. Communities water consumption results are provided by collecting and collating water use from invoices. Where invoices are unavailable or extend across financial years, estimates are provided for relevant periods. Water consumption by contractors operating on our development sites is compiled using invoice data and estimates, supplied by contractors through monthly health, safety and environment reports. Data has been reported for 100 per cent of properties this year. These figures are based on a combination of contractor estimates and invoice data. Reported non-potable consumption includes rainwater tanks and bore water.

Water consumption

COMMUNITIES WATER CONSUMPTION (kL)

Communities water data varies from year to year due to activities such as filling lakes in large developments and location specific variables such as natural rainfall, project life cycles, market conditions, site management techniques and local landscaping requirements set by councils.

	FY19	FY18	FY17	FY16	FY15
Residential sites	217,578	620,654	546,670	600,623	353,620
Retirement living communities	1,757,203	1,683,353	1,463,459 ³²	58,158	48,500
Contractors – Residential	451,937	392,940	577,592 ³³	1,948,614	1,469,853 ³⁴
Contractors – Retirement Living	- ³⁵	0 ³⁵	573 ³⁶	8,985	49,285
Total	2,426,717	2,696,947	2,588,294	2,616,380³⁷	1,921,258

COMMUNITIES WATER CONSUMPTION – POTABLE AND NON POTABLE (kL)

POTABLE					
	FY19	FY18	FY17	FY16	FY15
Residential sites	71,092	149,872	173,841	171,830	53,233
Retirement living communities	1,757,203	1,683,353	1,463,459	58,158	48,500
Contractors – residential	184,275	113,264	232,585	829,592	644,034
Contractors – retirement living	0 ³⁵	0 ³⁵ Error! Bookmark not defined.	327	8,682	38,897
Total	2,012,570	1,946,489	1,870,212	1,068,262	784,664
NON-POTABLE					
	FY19	FY18	FY17	FY16	FY15
Residential sites	146,486	470,782	372,829	428,793	300,387
Retirement living communities	-	0	0	0	0
Contractors – residential	267,661	279,675	345,007	1,119,022	825,820
Contractors – retirement living	0 ³⁵	0 ³⁵	246	303	10,388

³² A combination of more operational sites and increased data capture in FY17 has translated to an increase in comparison to previous years for Retirement Living.

³³ Large civil works in FY16 for master planned communities have reduced in FY17 across developments such as Aura (Qld), Cloverton (Vic) and Calleya (WA).

³⁴ Residential contractor water data varies from year to year due to activities such as dust suppression, to abnormal usage (filling lakes) in large developments and location specific variables such as natural rainfall, project life cycles, market conditions, site management techniques and local landscaping requirements set by councils. Furthermore, contractors self-report water data, which means we do not review each contractor's data collection processes. In FY15, we completed a comprehensive review of data sets provided to us by contractors, which provided a higher level of accuracy than in previous years.

³⁵ No development works in our Retirement Living business were considered to be within our operational control boundary from FY18.

³⁶ Decrease in Retirement Living contractor consumption due to management of site and reporting by principal contractor.

³⁷ We experienced an increase in both potable and non-potable water consumption due to new residential developments that commenced at the close of FY15 and during FY16.

Total	414,148	750,457	718,082	1,548,118	1,136,594
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COMMERCIAL PROPERTY WATER CONSUMPTION (kL)

	FY19	FY18	FY17	FY16	FY15
Workplace and Logistics	209,924	236,906	228,108	220,704	232,249
Retail Town Centres	1,101,228	1,097,238	1,112,672	1,153,565	1,096,808
Total Commercial Property	1,311,152	1,334,144	1,340,780	1,374,269	1,329,057

Water consumption intensity

Intensity figures in Commercial Property are derived from the total water consumption for each asset class over the year divided by the total floor area. Retail Town Centre and Workplace assets without a full 12 months of data include estimates for the missing months.

COMMERCIAL PROPERTY WATER CONSUMPTION INTENSITY (kL/m²)

	FY19	FY18	FY17	FY16	FY15
Workplace and Business Parks	0.62	0.67	0.64	0.65 ³⁸	0.58
Retail Town Centres	1.05	1.04	1.09	1.11	1.1
Total Commercial Property³⁹	0.96	0.96	0.95	1	0.96

COMMERCIAL PROPERTY WATER CONSUMPTION INTENSITY REDUCTIONS

	ANNUAL INTENSITY CHANGE (%)				
	FY19	FY18	FY17	FY16	FY15
Workplace and Business Parks	-7%	5%	-5%	12%	-8%
Retail Town Centres	1%	-5%	-2%	0%	0%
Total Commercial Property	0%	1%	-5%	4%	-2%

³⁸ Water usage increase due to various water leaks and an increase in irrigation due to new landscapes.

³⁹ Consumption Intensity data calculated based on Workplace and Business Parks, and Retail Town Centre consumption figures only. Does not include Logistics.

Waste

Waste data in this section is to be read in conjunction with the Waste and Materials Deep Dive available on our [website](#).

Boundary

We report against the same NGER Act operational control boundary that we use for energy and water. We report on all properties within this boundary, with the exception of some properties where our tenants run their own waste contracts. We also report on a small number of additional properties that fall out of our NGER Act boundary, but where we manage the waste contract for service provision purposes. Data provided by waste contractors is based on estimates (bin volumes converted to tonnes rather than weighed).

Operational waste

OPERATIONAL WASTE (TONNES)

	RETAIL TOWN CENTRES					WORKPLACE AND BUSINESS PARKS				
	FY19	FY18	FY17 ⁴⁰	FY16	FY15	FY19	FY18	FY17 ³⁵	FY16	FY15
Total waste	17,265	17,577	17,351	17,895	16,717	1,007	1,043	1,193	1,182	1,298
Total waste to landfill	10,768	11,730	11,969	10,858	11,537	712	661	739	680	806
Total waste recycled	6,497	5,846	5,382	7,038	5,181	295	383	454	502	491
Diversion from landfill (%)	38	33	31	39	31	29	37	38	42	38
% portfolio reporting	97	97	95	95	95	85	85	85	100	80

Development waste

Commercial Property

Our Commercial Property development construction waste is calculated based on the total number of projects for which we are the developer. Active waste is tracked through the builders, as for these sites the principal contractor has active control.

The data reported relates to our Retail developments as there have been no significant Workplace developments since FY12.

RETAIL TOWN CENTRES DEVELOPMENT WASTE (TONNES)

	FY19	FY18	FY17	FY16	FY15
Total waste	878	4,371	1,396	3,253	6,428
Waste recycled	829	3,910	678	2,684	5,940
Waste to landfill	50	461	718	569	487
Diversion from landfill	94%	89%	49%	83%	92%
Developments included (% by project value)	100%	100%	96%	100%	100%

⁴⁰ FY17 data restated due to contractor reporting error.

Communities

All Communities waste data was provided by contractors operating on our development sites during the reporting period. Data is estimated by contractors and is collected from monthly health, safety and environment reports submitted to us by our contractors for all developments within our operational control.

COMMUNITIES CONTRACTOR WASTE (TONNES)

	FY19	FY18	FY17	FY16	FY15
Total waste	41,093	19,625	41,237	35,424	82,033
Waste diverted from landfill	40,430	18,441	39,923	33,881	78,415
Waste sent to landfill	663	1,184	1,314	1,542	3,617
Diversion from landfill	98%	94%	97%	96%	96%

Asset ratings and certifications

The tables below list ratings and certifications achieved across our portfolio, focusing on Green Star and NABERS⁴¹ rating tools. Information on achievements specific to FY19 are provided in our [Asset Rating and Certification Deep Dive](#). Information on our use of ratings and certifications across our portfolio is provided in [Our Management Approach to Asset Rating and Certification](#).

Green Star – Performance

Green Star – Performance is a voluntary certification that rates building performance in operation.

GREEN STAR – PERFORMANCE, RETAIL TOWN CENTRES

BUILDING NAME	POTABLE WATER (kL/m ² /ANNUM)	GHG EMISSIONS (kg/CO ₂ -e/ANNUM)	POINTS AWARDED	RATING
Stockland Jesmond (NSW)	1.21	58	31.5	3 Star
Stockland Bathurst (NSW)	0.42	37	39	3 Star
Stockland Glendale (NSW)	0.89	14	40	3 Star
Stockland Baulkham Hills (NSW)	1.41	62	33.5	3 Star
Stockland Forster (NSW)	0.6	9	44.5	3 Star
Stockland Nowra (NSW)	0.51	35	40.5	3 Star
Stockland Rockhampton (Qld)	1.62	109	30	3 Star
Stockland Caloundra (Qld)	0.53	45	38.5	3 Star
Stockland Green Hills (NSW)	0 ⁴²	0	24	2 Star
Stockland Shellharbour (NSW)	1.73	68	34	3 Star
Stockland Townsville (Qld)	1.26	112	36.5	3 Star
Stockland Gladstone (Qld)	1.1	33	34.5	3 Star

⁴¹ NABERS is the National Australian Built Environment Rating System (www.nabers.gov.au).

⁴² Water and emissions figures for Stockland Green Hills (NSW) were not provided as part of the Green Star – Performance rating because we did not have a NABERS Water or NABERS Energy rating for this asset at the time of submitting the Green Star – Performance application.

BUILDING NAME	POTABLE WATER (kL/m ² /ANNUM)	GHG EMISSIONS (kg/CO ₂ -e/ANNUM)	POINTS AWARDED	RATING
Stockland Cairns (Qld)	1.25	90	39.5	3 Star
Stockland Burleigh Heads (Qld)	0.58	74	37	3 Star
Stockland Bundaberg (Qld)	0.94	69	35	3 Star
Stockland Bull Creek (WA)	0	25	32	3 Star
Stockland Riverton (WA)	0.98	35	34	3 Star
Stockland Hervey Bay (Qld)	0.69	73	39.5	3 Star
Stockland Point Cook (Vic)	0.79	103	31.5	3 Star
Stockland Traralgon (Vic)	0.58	64	38	3 Star
Stockland The Pines (Vic)	1.01	91	28	2 Star
Stockland Wendouree (Vic)	0.64	45	37.5	3 Star
Stockland Merrylands	1.42	89	32	3 Star
Stockland Wetherill Park	-	93	32.5	3 Star
Stockland Baldivis	1.42	68	26	2 Star

GREEN STAR – PERFORMANCE, WORKPLACE AND BUSINESS PARKS

BUILDING NAME	POTABLE WATER (kL/m ² /ANNUM)	GHG EMISSIONS (kg/CO ₂ -e/ANNUM)	POINTS AWARDED	RATING
110 Walker Street (NSW)	0.872	63	31.5	3 Star
16 Giffnock Avenue (NSW)	0.695	90	28.5	2 Star
2 Victoria Ave (WA)	⁴³	-	18	1 Star
40 Cameron Avenue (ACT)	0.651	75	26	2 Star
601 Pacific Highway (NSW)	0.682	67	31.5	3 Star
66 Waterloo Road (NSW)	0.469	54	34	3 Star
77 Pacific Highway (NSW)	0.560	68	32.5	3 Star
80-88 Jephson Street (Qld)	0.779	133	23	2 Star
Durack Centre (WA)	⁴⁴	62	23	2 Star
Macquarie Technology Centre (NSW)	3.073	155	17	1 Star

⁴³ Water and emissions figures for 2 Victoria Avenue (WA) were not provided as part of the Green Star – Performance rating because we did not have a NABERS Water or NABERS Energy rating for this asset at the time of submitting the Green Star – Performance application.

⁴⁴ Water figures for Durack Centre (WA) were not provided as part of the Green Star – Performance rating because we did not have a NABERS Water rating for this asset at the time of submitting the Green Star – Performance application.

BUILDING NAME	POTABLE WATER (kL/m ² /ANNUM)	GHG EMISSIONS (kg/CO ₂ -e/ANNUM)	POINTS AWARDED	RATING
Optus Centre (NSW)	0.720	84	31.5	3 Star
Satellite Corporate Centre 352 Wellington Road (Vic)	1.04	122	21	2 Star
Satellite Corporate Centre 352 Wellington Road (Vic)	0.546	140	23.5	2 Star
Satellite Corporate Centre 690 Springvale Road (Vic)	0.726	357	15	1 Star
Trinity Business Campus Building T1 (NSW)	0.805	72	37	3 Star
Trinity Business Campus Building T2 NSW)	0.805	83	36	3 Star
Trinity Business Campus Building T3 (NSW)	0.805	63	38	3 Star
133 Castlereagh Street (NSW)			31	3 Star
222 Pitt Street (NSW)			33.5	3 Star
135 King Street (NSW)			28.5	2 Star

Green Star – Built Form rating tools

Our Green Star ratings achieved using built form rating tools including Green Star – Design & As Built, Green Star – Communities, and Green Star – Interiors, are provided in the table below.⁴⁵

ASSET TYPE	ASSET	DESIGN RATING (STAR)	AS BUILT RATING (STAR)	GREEN STAR TOOL
Retail Town Centre				
	Stockland North Shore (Qld)	4	4	Retail Centre v1
	Stockland Townsville (Qld)	4	4	Retail Centre v1
	Stockland Merrylands (Stages 3 & 4) (NSW)	4	–	Retail Centre v1
	Stockland Shellharbour (NSW)	4	4	Retail Centre v1
	Stockland Hervey Bay (Qld)	4	4	Retail Centre v1
	Stockland Baldivis (WA)	4	4	Retail Centre v1
	Stockland Wetherill Park (NSW)	5	5	Retail Centre v1
	Stockland Harrisdale (WA)	4	4	Retail Centre v1
	Stockland Green Hills (NSW)	5	5	Retail Centre v1
Workplace	Trinity, Building A, 39 Delhi Road, North Ryde, NSW	–	5	Office v2

⁴⁵ The percentage of our portfolio with a Green Star built form rating is 19 per cent for Commercial Property (Green Star – Design & As Built), 14 per cent for Residential (Green Star – Communities), and six per cent for Retirement Living (Green Star – Design and/or As Built).



ASSET TYPE	ASSET	DESIGN RATING (STAR)	AS BUILT RATING (STAR)	GREEN STAR TOOL
	Triniti, Building B, 39 Delhi Road, North Ryde, NSW	–	5	Office v2
	Triniti, Building C, 39 Delhi Road, North Ryde, NSW	–	5	Office v2
	2 Victoria Avenue, Perth, WA	6	5	Office v2
	Sydney Head Office, L22-29, 133 Castlereagh Street, Sydney, NSW	–	6	Interiors v1.1
Communities (Residential)	Aura (formerly Caloundra South) (Qld)	6		Communities Pilot
	Altrove (NSW)	5		Communities
	Willowdale (NSW)	6		Communities
	The Grove (Vic)	5		Communities
	Cloverton (Vic)	6		Communities
	Calleya (WA)	6		Communities
	Newport (Qld)	5		Communities
	Waterlea (formerly Stamford Park) (Vic)	6		Communities
Communities (Retirement Living)	Affinity Clubhouse at Affinity Retirement Village, Baldivis (WA)	5	5	Public Building Pilot
	Newport Retirement Living Village (Qld)	4		Design and As Built v1.1 (Design Review)
	Selandra Rise Retirement Village (Vic)	4	–	Custom
	Mernda Retirement Village (Vic)	4	–	Custom
	Willowdale Retirement Village (NSW)	4	–	Custom

NABERS

We undertake NABERS Energy and NABERS Water ratings on the base building across Retail Town Centre, Workplace and Business Parks assets. NABERS maintains an eligibility requirement specifying that Retail assets under 15,000 square metres cannot be rated. NABERS ratings are completed on a calendar year basis.

NABERS RATINGS – RETAIL TOWN CENTRES

	NABERS ENERGY RATING					NABERS WATER RATING				
	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
Stockland Cairns (Qld)	4.5	4.5	5.0	4.0	4.5	4.0	4.0	NA	4.0	4.0
Stockland Townsville (Qld)	4.5	4.5	4.0	3.5	3.5	3.5	4.0	4.0	4.0	NA
Stockland Rockhampton (Qld)	4.0	3.5	3.0	3.5	3.5	3.0	2.5	2.5	2.5	3.0
Stockland Gladstone (Qld)	5.0	5.5	5.5	4.5	4.0	4.5	NA	NA	3.0	NA

	NABERS ENERGY RATING					NABERS WATER RATING					2014
	2018	2017	2016	2015	2014	2018	2017	2016	2015		
Stockland Bundaberg (Qld)	4.5	4.0	4.5	5.0	4.0	3.5	4.0	4.5	4.0	NA	
Stockland Caloundra (Qld)	5.0	4.5	4.5	4.5	4.5	5.0	5.0	5.0	5.0	5.0	
Stockland Hervey Bay (Qld)	5.0	4.5	5.0	4.5	NA	5.0	5.0	4.0	4.5	NA	
Stockland Burleigh Heads (Qld)	4.0	4.0	3.5	3.5	3.5	4.5	4.5	4.5	5.0	5.0	
Stockland Forster (NSW)	6.0	6.0	6.0	6.0	6.0	4.5	4.5	4.5	4.5	4.5	
Stockland Green Hills (NSW)	NA ⁴⁶	NA	NA	3.5	3.5	NA	NA	NA	3.0	3.0	
Stockland Jesmond (NSW)	4.5	4.5	4.5	4.5	4.5	1.0	2.0	1.0	2.0	3.0	
Stockland Glendale (NSW)	6.0	6.0	6.0	6.0	5.5	4.0	3.5	3.5	3.5	3.0	
Stockland Baulkham Hills (NSW)	4.5	4.5	4.0	4.0	3.5	2.0	2.0	1.0	0	0.0	
Stockland Wetherill Park (NSW)	3.0	3.0	2.5	NA	NA	2.5	3.0	NA	NA	NA	
Stockland Shellharbour (NSW)	5.0	5.0	4.0	4.5	4.5	2.5	1.0	1.5	1.5	0.0	
Stockland Nowra (NSW)	4.5	4.5	4.5	4.5	4.5	5.0	4.5	4.5	4.5	4.5	
Stockland Traralgon (Vic)	4.0	4.0	4.0	4.0	4.0	5.0	4.5	4.0	4.0	4.0	
Stockland Wendouree (Vic)	4.5	4.5	4.0	4.0	4.0	4.5	4.5	4.5	4.5	4.0	
Stockland Bull Creek (WA)	4.5	4.5	4.5	4.0	4.5	1.0	NA	NA	NA	NA	
Stockland Riverton (WA)	4.5	4.5	4.5	4.5	4.0	2.5	2.0	1.5	NA	NA	
Stockland The Pines (Vic)	2.0	2.0	2.0	2.5	NA	3.0	3.0	3.0	3.0	NA	
Stockland Point Cook (Vic)	3.0	2.5	1.5	2.5	NA	4.5	4.0	4.0	4.0	NA	
Stockland Merrylands (NSW)	4.0	4.0	NA	NA	NA	2.5	2.0	NA	NA	NA	
Stockland Baldivis (WA)	3.0	2.5	2.0	NA	NA	1.0	2.0	NA	NA	NA	
NABERS Retail Portfolio Average	4.3	4.1	3.9	4.1	4.2	3.5	3.1	3.2	2.8	2.6	
NABERS Retail Portfolio Average (By % ownership)	4.3					3.4					

NABERS RATINGS – WORKPLACE AND BUSINESS PARKS⁴⁷

	NABERS ENERGY RATING					NABERS WATER RATING				
	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
WORKPLACE										
Piccadilly Tower, 133 Castlereagh St, Sydney	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.5	4.5	4.5
Piccadilly Court, 222 Pitt St, Sydney	5.0	5.0	5.0	5.0	5.0	3.5	4.0	4.0	4.0	4.0

⁴⁶ Green Hills came out of development in FY18 and does not have a full 12 months of operational energy and water data for a NABERS rating in FY19..

⁴⁷ 63 per cent of our Commercial Property portfolio (including Retail Town Centre, Workplace and Logistics) is covered by one or more NABERS ratings.

	NABERS ENERGY RATING					NABERS WATER RATING				
	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
135 King St, Sydney	5.0	4.5	4.0	4.0	4.0	3.5	3.5	3.0	3.0	3.0
110 Walker St, North Sydney	5.0	5.0	5.0	4.5	4.0	3.5	3.0	3.0	3.5	3.0
601 Pacific Hwy, St Leonards	5.0	5.0	5.0	5.0	4.5	3.0	3.0	4.0	4.0	4.5
80-88 Jephson Street, Toowong	0.0	0.0	2.5	2.0	4.0	3.5	4.0	4.0	4.0	4.0
Durack Centre, 263 Adelaide Terrace, Perth	4.5	4.5	4.5	5.0	5.0	4.5	NA	NA	3.5	4.0
2 Victoria Avenue, Perth	4.0	0.0	NA	5.0	5.0	3.5	0.0	NA	4.0	3.0
NABERS Workplace Portfolio Average	4.6	4.5	4.6	4.5		3.6	3.5	3.9	3.7	
NABERS Workplace Portfolio Average (By % ownership)	4.5					3.6				
BUSINESS PARKS										
Optus Centre, 1 Lyon Park Road, North Ryde	4.5	4.5	5.0	5.0	4.5	NA ⁴⁸	4.0	3.5	3.5	3.5
Trinity, Building A, 39 Delhi Road, North Ryde ⁴⁹	5.0 ⁵⁰	4.5	4.5	5.0	5.5	4.0	3.5	3.5	5.0	4.5
Trinity, Building B, 39 Delhi Road, North Ryde	5.0	4.5	4.5	5.0	5.0	4.0	3.5	3.5	4.0	4.0
Trinity, Building C, 39 Delhi Road, North Ryde	5.0	5.0	5.0	5.0	5.0	4.0	3.5	3.5	3.5	3.5
66 Waterloo Road, North Ryde	5.5	5.5	5.0	5.0	4.5	4.0	4.0	4.5	4.5	3.5
16 Giffnock Ave, North Ryde	4.0	4.0	4.0	3.5	3.0	3.5	3.5	3.5	3.5	3.5
11-17 Khartoum Road, North Ryde	3.0	2.0	2.0	4.0	3.5	0.0	0.0	0	NA	NA
350 Wellington Rd, Mulgrave ⁵¹	2.0	3.0	NA	3.0	NA	0.0	0.0	NA	NA	NA
352 Wellington Rd, Mulgrave	3.0	3.0	3.0	3.5	NA	3.5	3.5	3.5	NA	NA
690 Springvale Rd, Mulgrave	2.5	2.0	NA	1.5	NA	4.0	2.5	NA	NA	NA
NABERS Business Parks Portfolio Average	4.3	4.2	4.7	4.9	4.6	3.2	3.5	3.4	3.6	3.7
NABERS Business Parks Portfolio Average (By % ownership)	4.3					3.2				
NABERS Workplace and Business Parks Combined Portfolio Average	4.4	4.3	4.7	4.7		3.4	3.5	3.6	3.6	

⁴⁸ No water rating possible for Optus due to issues with water utility data

⁴⁹ The water rating for Trinity (NSW) is a single rating for the whole campus.

⁵⁰ The energy rating for Trinity (NSW) is a single rating for the whole complex

⁵¹ The 2015 rating included Green Power – without Green Power the rating would be 2.5 stars.



	NABERS ENERGY RATING					NABERS WATER RATING				
	2018	2017	2016	2015	2014	2018	2017	2016	2015	2014
NABERS Workplace and Business Parks Combined Portfolio Average (By % ownership)	4.4					3.4				
LOGISTICS										
11 Viola Place Brisbane Airport	4.0	4.5	NA	NA	NA	NA	NA	NA	NA	NA

NABERS ratings – Stockland Corporate Office

We are a CitySwitch⁵² signatory for our corporate offices in Sydney, Melbourne and Perth. We complete a NABERS Tenancy rating each calendar year for our corporate offices, as outlined below.

NABERS RATINGS – STOCKLAND CORPORATE OFFICES

	TENANCY RATING				
	2018	2017	2016	2015	2014
Sydney Head Office, L22-29, 133 Castlereagh Street	4.0	4.0	4.0	4.5	4.5
Melbourne Head Office, L7, 452 Flinders Street	4.0	3.5	3.5	3.5	3.5
Perth Head Office, L12, 263 Adelaide Terrace	4.5	3.5	3.5	3.5	3.0
Brisbane Head Office, L4, 99 Melbourne Street	4.5	4.5	NA	NA	NA

⁵² CitySwitch supports commercial office tenants to improve office energy and waste efficiency (www.cityswitch.net.au).

Climate and Community Resilience

The tables below summarise the individual climate and community resilience scores for our retail town centres, residential communities and retirement living communities. Note that our community resilience scorecard was launched in FY16 and so there are no community resilience scores available for assets assessed earlier than FY16.

Resilience scores range from 1 (low vulnerability, more resilience) through 9 (high vulnerability, less resilience). [Our Management Approach to Climate Resilience](#) provides more detail on our climate and community resilience assessment methods.

CLIMATE AND COMMUNITY RESILIENCE SCORES BY ASSET

LOCATION	YEAR	CLIMATE RESILIENCE RATING	COMMUNITY RESILIENCE RATING
COMMERCIAL PROPERTY			
Stockland Cairns (Qld)	FY12	6.30	–
	FY17	5.81	–
Stockland Rockhampton (Qld)	FY14	6.13	–
	FY17	5.84	–
Stockland Hervey Bay (Qld)	FY12	6.00	–
	FY17	5.29	–
Stockland Townsville (Qld)	FY14	5.72	
	FY17	5.20	
	FY18	5.00	5.71
Townsville Kmart (Qld)	FY14	5.85	–
	FY17	5.20	–
Stockland Gladstone (Qld)	FY12	5.84	–
	FY17	5.29	–
Stockland North Shore (Qld)	FY14	5.69	–
	FY17	5.49	–
Stockland Bull Creek (WA)	FY14	5.50	–
Stockland Wetherill Park (NSW)	FY13	5.41	–
Point Cook Town Centre (Vic)	FY13	5.30	–
Stockland Green Hills (NSW)	FY13	5.27	5.18
Stockland Wendouree (Vic)	FY14	4.69	–
Stockland Traralgon (Vic)	FY14	4.59	–
	FY18	-	5.18
Stockland Forster (NSW)	FY15	4.48	–



LOCATION	YEAR	CLIMATE RESILIENCE RATING	COMMUNITY RESILIENCE RATING
Stockland Bundaberg (Qld)	FY16	5.69	-
	FY18	-	5.99
Stockland Bathurst (NSW)	FY15	4.23	-
Stockland Nowra (NSW)	FY16	4.21	-
	FY18	4.90	5.05
Durack Centre (WA)	FY12	5.90	-
2 Victoria Avenue (WA)	FY12	5.80	-
601 Pacific Highway (NSW)	FY18	4.52	-
Trinity Business Campus (NSW)	FY18	5.37	-
32 Toll Drive (VIC)	FY18	4.83	-
Yennora Distribution Centre	FY19	4.93	-
Hendra Distribution Centre	FY19	5.42	-
Port Adelaide Distribution Centre	FY19	6.04	-
Stockland Shellharbour	FY19	5.07	4.82
Stockland Caloundra	FY19	5.96	5.44
Stockland Cleveland	FY19	5.67	4.52
Stockland Burleigh Heads	FY19	5.75	4.79
Commercial Property Average (Climate Resilience)		5.47	5.19
COMMUNITIES (RESIDENTIAL)			
Elara (NSW)	FY15	5.2	-
Aura (Qld)	FY15	5.4	-
Willowdale (NSW)	FY16	5.4	5.7
Cloverton (Vic)	FY16	5.6	5.6
The Grove (Vic)	FY16	5.6	5.9
Altrove (NSW)	FY16	5.8	4.7
Newport (Qld)	FY16	5.5	4.7
Calleya (WA)	FY16	5.3	4.9
Birtinya (Qld)	FY17	5.7	5.9
Foreshore (Qld)	FY17	6.3	6.4
Toowong (Qld)	FY17	5.6	5.0

LOCATION	YEAR	CLIMATE RESILIENCE RATING	COMMUNITY RESILIENCE RATING
North Shore (Qld)	FY17	5.8	5.9
Pallara (Qld)	FY17	5.6	6.1
Sienna Wood (WA)	FY17	6.2	6.5
Waterlea (Vic)	FY17	5.0	4.7

ASSESSMENTS FROM FY18 ONWARDS	RESILIENCE RATING ⁵³		
Braybrook (Vic)	FY18	5.7	
Kalina (Qld)	FY18	5.7	
Paradise Waters (Qld)	FY18	5.5	
Mt Atkinson (Vic)	FY18	5.4	
Altona North (Vic)	FY18	5.0	
Minta Farm (Vic)	FY18	5.7	
Edgebrook (Vic)	FY18	5.9	
Hope Island (QLD)	FY19	4.6	
Paradise Waters (QLD)	FY19	6.6	
Promenade (QLD)	FY19	7.1	
Glendalough (WA)	FY19	5.5	
Wellard (WA)	FY19	7.8	
Communities (Residential) Average		5.9	5.5
COMMUNITIES (RETIREMENT LIVING)			
Highlands (Vic)	FY13	4.8	–
The Village Swansea (NSW)	FY13	6.1	–
	FY17	5.8	5.0
Farrington Grove (Qld)	FY16	4.6	–
	FY17	4.8	5.2
The Cove (NSW)	FY16	6.6	4.8
Maybrook (NSW)	FY16	5.4	5.0
Patterson Lakes (Vic)	FY16	5.7	4.6
Salford Waters (Qld)	FY16	5.4	4.0

⁵³ From FY18, as part of our evolving approach to resilience assessment, our climate and community resilience ratings were combined to deliver an integrated resilience rating for our Communities portfolio.

Hillsview (SA)	FY16	5.8	5.1
Walnut Grove (SA)	FY16	5.8	4.9
Gillin Park (Qld)	FY17	5.2	5.5
Pine Lake (Qld)	FY17	5.4	4.9
Birtinya, Oceanside (Qld)	FY17	5.3	6.0
Calleya (WA)	FY17	5.6	5.0
Cardinal Freeman (NSW)	FY17	4.8	4.7
The Pines (Vic)	FY17	5.0	5.3
Oak Grange (Vic)	FY17	4.8	5.4
Newport (Qld)	FY17	5.6	4.7
ASSESSMENTS FROM FY18 ONWARDS		RESILIENCE RATING⁵⁴	
Bellevue Gardens (NSW)	FY18	5.7	-
Golden Ponds (NSW)	FY18	5.9	-
Wamberal Gardens (NSW)	FY18	5.4	-
Lourdes (NSW) ⁵⁵	FY19	6.6	-
Belcarra (QLD)	FY19	6.6	-
Affinity (WA)	FY19	5.9	-
Communities (Retirement Living) Average		5.6	5.0

⁵⁴ From FY18, as part of our evolving approach to resilience assessment, our climate and community resilience ratings were combined to deliver an integrated resilience rating for our Communities portfolio.

⁵⁵ Assessments in FY19 were completed using the new Group Resilience Assessment Tool Framework