

NET ZERO MOMENTUM TRACKER

PROPERTY SECTOR

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Australia's property sector is moving towards net zero emissions

The Property Sector report is the first in a series of Net Zero Momentum Tracker assessments that focus on key sectors of the Australian economy. The Net Zero Momentum Tracker is an initiative that demonstrates progress towards net zero greenhouse gas emissions in Australia. It brings together and evaluates climate action commitments made by Australian businesses, governments and other organisations.

Achieving net zero emissions prior to 2050 is a key element of the Paris Climate Agreement to limit global temperature rise to well below 2 degrees Celsius above pre-industrial levels and to strive for 1.5 degrees¹.

This report examines influential companies within the Australian property sector and those with the highest reported emissions. It includes the property companies listed in the ASX200 and those required to report their emissions under the National Greenhouse and Energy Reporting Act 2007 (NGER Act)ⁱ.

Our analysis finds 43% of these companies have a net zero target or aspiration, of which:

- + 29% have pledged to achieve net zero emissions by 2050 for their owned and managed assets. These companies represent 36% of total ASX200 property sector market capitalisationⁱⁱ.
- + 14% have made climate commitments that align with a pathway to achieve net zero emissions by 2050 but have not yet explicitly pledged to achieve this goal.

There remains significant opportunity in the property sector for companies to strengthen their commitments to align with net zero emissions by 2050. None of the property companies examined have targets that address all of their emissions, and 9.5% have not announced any emissions reduction commitments or activities.

i The criteria which determine which facilities and corporations are required to submit emissions and energy reports under the NGER Act are outlined at <http://www.cleanenergyregulator.gov.au/NGER/Reporting-cycle/Assess-your-obligations/Reporting-thresholds>.

ii The ASX200 consists of the 200 largest public companies by market capitalisation listed on the Australian Securities Exchange (ASX). Market capitalisation is a measure of a publicly listed company's value, calculated by multiplying the number of shares held by the company's investors by the current share price.

MOMENTUM TOWARDS NET ZERO IN AUSTRALIA'S PROPERTY SECTOR

WE LOOKED AT THE

- + Largest property companies by market capitalisation
- + Biggest property sector greenhouse gas emitters

AND FOUND:

43%

of companies have a target, aspiration, or are on a path closely aligned with net zero greenhouse gas emissions before 2050.

29%

Closely aligned to net zero target

14%

Aligned aspiration/ pathway

47.5%

of companies are taking steps to reduce greenhouse gas emissions.

38%

Not aligned

9.5%

Partially aligned net zero target

9.5%

of companies have not announced any emissions reduction commitments or activities.

0%

of companies have a net zero before 2050 pledge or target that includes all emissions the organisation is accountable for.

SECTOR INFLUENCE

The property sector has an important influence on Australia's economy and emissions

Property is a key component of Australia's economy. The property sector is the fifth largest in the ASX200 in terms of market capitalisation. Property market performance impacts Australia's financial stability. This is because changes in property prices influence: the proportion of household income available for consumer spending; the ability of households and business owners to secure loans; and the amount of building activity that takes place².

Property companies reporting under the NGER Act collectively reported emissions of 1.5 million tonnes of carbon dioxide (MtCO₂e) in 2017/18ⁱⁱⁱ.

Although this sector's emissions represent a small proportion of Australia's national emissions³, the property sector's influence on Australia's overall energy use and emissions is more extensive. This is because the sector consists of organisations which construct, own, manage and invest in residential, social and commercial buildings and infrastructure. Buildings consume over half of Australia's electricity, and are a key driver of peak demand across the electricity grid. Almost a quarter of Australia's national emissions stem from the operation of buildings⁴.

GLOBAL CONTEXT

Australian companies are world leaders in property sector sustainability

Australian property companies are viewed as global leaders on climate action within their sector⁵. Over one-third of companies signed up to the World Green Building Council's Global Net Zero Carbon Buildings commitment are Australian owned, or have based a large proportion of their operations in Australia⁶.

This reflects a global trend where the property sector is taking steps to reduce its emissions. In the 2019 Forbes list of the world's largest real estate companies⁷, three of the top ten (AvalonBay Communities, Gecina and Prologis) have set targets for net zero emissions by 2050⁸.

Property organisations can derive considerable benefit by reducing emissions from the development and operation of assets in their real estate portfolios. Improving the energy performance of buildings reduces operating costs. Sustainably constructing and retrofitting buildings improves health, resilience and productivity outcomes for households and businesses.

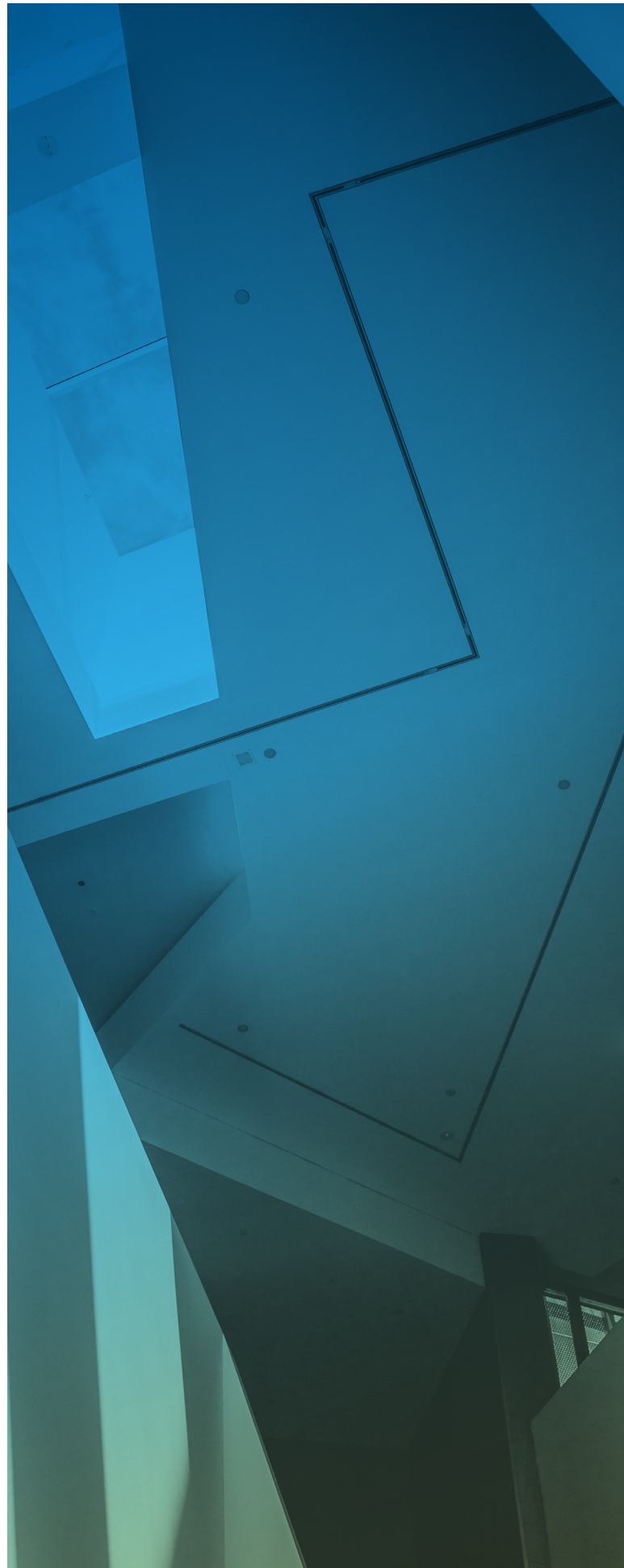
This also limits the property sector's exposure to escalating risks due to climate change impacts, such as more frequent and/or more severe extreme weather events⁴. Increased demand for sustainable buildings has driven comparatively higher sales prices, rents and occupancy rates⁹.

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iii The emissions data used to calculate this figure is detailed in the Appendix.

PLEDGE PLATFORMS

Climate action initiatives that have been embraced by Australian property companies include:

- + **The Science Based Targets Initiative (SBTi)**, which is a collaboration between CDP (formerly the Carbon Disclosure Project), the UN Global Compact, the World Resources Institute and the World Wide Fund for Nature. The SBTi Initiative considers targets to be science based if commitments are consistent with limiting global temperature rise to well below 2 degrees Celsius or 1.5 degrees Celsius above pre-industrial levels. SBTi's goal is for target setting based on this definition to be standard business practice by 2020. Two of Australia's leading real estate organisations have achieved certification from SBTi: Dexus, with an Australian property portfolio valued at \$28.9 billion, and Investa, who own and manage an Australian commercial real estate portfolio valued at more than \$10 billion.
- + **The We Mean Business coalition's RE100, EP100 and EV100 initiatives**, which aim to encourage corporations to switch to 100% renewable electricity (RE100), optimise their energy productivity (EP100) and accelerate the transition to electric transport (EV100). The Australian real estate organisations Dexus, GPT Group and Stockland have become EP100 members through their commitment to operate buildings they own, occupy or develop at net zero carbon by 2030.
- + **The World Green Building Council's Net Zero Carbon Buildings Commitment** requires signatories to commit to net zero carbon operating emissions within their portfolios by 2030, and to advocate for all buildings to be net zero in operation by 2050. This commitment is one of three pathways available to join EP100. Dexus, GPT Group and Stockland are signatories to this commitment.



ANALYSIS

Australian property sector climate commitments

Net Zero Momentum Tracker assessed the pledges, commitments and activities of twenty one Australian property companies to evaluate if they are aligned with achieving net zero emissions before 2050. The analysis included all property companies listed in the ASX200 and those required to report their emissions under the NGER Act. Table 1 shows an assessment of each company's net zero ambition. Table 2 evaluates supporting emissions reduction activities. Supplementary detail for both Tables 1 and 2 is provided in the appendix.

Our analysis shows nineteen companies (90% of those examined) have an emissions reduction target, have made more general commitments, or are undertaking initiatives that will reduce their greenhouse gas emissions.

Of the twenty one assessed:

- + Six companies (29%) have committed to an emissions reduction target that is aligned with achieving net zero emissions before 2050 for their owned and managed assets. These targets cover a significant proportion of each company's operational emissions. These six companies represent 36% of total ASX200 property sector market capitalisation.
- + Three of the companies considered (14%) have not yet committed to net zero emissions by 2050 but have either expressed an aspiration to or are on a path closely aligned with this goal.

- + Two companies (9.5%) have a net zero by 2050 emissions target but it excludes a sizable component of the organisation's activities.
- + Eight companies (38%) have made a commitment, pledge or are undertaking activities that will reduce their emissions, but are not aligned with a pathway to net zero emissions before 2050, or the alignment is unclear due to insufficient information.
- + Two companies (9.5%) have no apparent emissions reduction commitments and have not reported any emissions reduction activities.

None of the companies considered have a comprehensive target or are conducting activities to address all of the emissions they could reduce or offset. Some commitments specifically exclude emissions from sources not directly controlled by property companies (such as tenant energy consumption, water usage, waste, materials, services and investments). Others exclude emissions from co-owned assets.

Of the property companies assessed that have committed to achieving net zero emissions before 2050, Mirvac and Dexu have published a strategy articulating how this target would be achieved. However, most others with a specific emissions pledge have no apparent emissions reduction strategy, although some have stated that they will draft one.



CASE STUDIES

DEXUS:

AUSTRALIA'S BIGGEST OFFICE LANDLORD HAS A NET ZERO AMBITION

Among the property companies considered by the Net Zero Momentum Tracker, the Dexus Property Group's net zero emissions commitment is comparatively ambitious and comprehensive.

Dexus is Australia's largest owner and manager of office property and has committed to achieve net zero emissions across its property portfolio by 2030. This pledge is supported by the Group's New Energy New Opportunities approach¹⁰, which addresses emissions from electricity consumption and the onsite use of fossil fuels, as well as considering upstream and downstream emissions from waste, water use and air conditioning refrigerants.

Steps taken include electrifying buildings; supplying electricity from on and off-site renewables; negotiating long term renewable power purchase agreements; and reducing energy consumption through smart building technologies. Dexus has also undertaken a building refurbishment program to install onsite renewables where feasible, and to phase out gas and diesel powered facilities and appliances.

MIRVAC GROUP:

GOING BEYOND NET ZERO

Mirvac's pledge to be 'net positive' by 2030 is unique amongst those considered by the Net Zero Momentum Tracker.

The group is Australia's second-largest office manager and a developer of both commercial and residential properties. By striving to achieve net positive carbon emissions by 2030, the group aims to provide an environmental benefit by eliminating more carbon dioxide than it generates from its operational activities.

Renewable energy is a key component of Mirvac's net positive strategy. They have set up an energy company to install rooftop solar on their commercial buildings and sell power to occupants. Their award winning 8 Chifley office tower development was fitted with a tri-generation (combined cooling, heat and power) plant, which was upsized in order to export excess power to the grid. Mirvac has also undertaken a 'house with no bills' pilot project to explore how their upstream indirect emissions can be minimised for residential developments.

GPT GROUP:























DRIVING THE PLACES WE WORK AND SHOP TOWARDS NET ZERO

One of Australia's largest diversified property groups, GPT owns and manages some of Australia's most well-known retail, office and logistics properties including Melbourne Central, Sydney's Australia Square and Brisbane's Riverside Centre. GPT has pledged to achieve net zero emissions for buildings it has an ownership interest in by 2030, including buildings it co-owns or does not manage. In addition, the GPT Wholesale Office Fund, a multi-billion dollar portfolio of office assets, has pledged to be carbon neutral by 2020.

To reduce energy consumption, GPT has undertaken technology replacement (eg LED lighting), retrofits and upgrades and implemented building management technologies. The group is purchasing electricity from renewable sources and installing onsite solar generation and battery storage. Use of gas is being reduced through electrification. Carbon offsets are purchased for emissions that are not mitigated.

To engage tenants in its initiatives, GPT holds forums on building management and performance and hosts tours of energy efficient buildings.

TABLE 01: COMPANIES GROUPED BY NET ZERO AMBITION AND PROPERTY SECTOR MARKET CAPITALISATION

NET ZERO AMBITION	% OF ASX200 PROPERTY SECTOR MARKET CAPITALISATION	COMPANY
		<i>*This can be you...</i>
	10%	Dexus
	9%	Mirvac Group
	8%	GPT Group
	7%	Vicinity Centres
	2%	Cromwell Property Group
	NA	Investa (ICPF)
	6%	Charter Hall Group
	2%	Unibail Rodamco Westfield
	2%	Growthpoint Property
	7%	Stockland Corporation
	5%	Lendlease Group
	19%	Goodman Group
	14%	Scentre Group
	2%	Abacus Property Group
	2%	Sca Property Group
	2%	BWP Trust
	1%	National Storage
	1%	Aveo Group
	NA	ISPT Pty Ltd
	1%	Viva Energy REIT
	NA	Toga Pty Ltd

FULLY ALIGNED

Net zero before 2050 pledge or target includes all emissions organisation is accountable for.

CLOSELY ALIGNED

Net zero before 2050 pledge or target includes emissions from direct operations.

ALIGNED ASPIRATION/PATHWAY

Organisation has expressed an aspiration to achieve net zero before 2050 for emissions from direct operations or has other targets/is undertaking activities which align with this pathway.

PARTIALLY ALIGNED

Net zero before 2050 pledge or target only includes a portion of emissions from direct operations.

NOT ALIGNED

Emissions reduction targets and activities not aligned with net zero before 2050.

NO EMISSIONS REDUCTION TARGETS OR ACTIVITIES

No disclosed emissions reduction targets, commitments or activities.

Table 1 includes property companies listed in ASX200 and those reporting emissions under NGER Act. It groups these property companies by net zero ambition and orders them within each group by market capitalisation.

Details to support the assessment of ambition are provided in the appendix.

**No company has a fully aligned net zero ambition, yet.*

TABLE 02: ASSESSMENT OF EMISSIONS REDUCTION ACTIVITIES

COMPANY	TOTAL SCOPE 1 AND 2 EMISSIONS (tCO ₂ e)	EFFICIENCY	RENEWABLE ELECTRICITY	ELECTRIFICATION	NON-ENERGY
Dexus	149,366	●	●	●	●
Mirvac Group	79,454	●	●	●	●
GPT Group	119,537	●	●	○	●
Vicinity Centres	191,330	●	●	○	○
Cromwell Property Group	-	●	●	●	●
Investa (ICPF)	63,337	●	○	○	●
Charter Hall Group	82,978	●	●	○	○
Unibail Rodamco Westfield	-	○	○	○	○
Growthpoint Property	14,198	●	○	○	○
Stockland Corporation	108,451	●	●	○	○
Lendlease Group	282,964	○	○	○	●
Goodman Group	35,524	●	●	○	○
Scentre Group	280,472	●	●	○	○
Abacus Property Group	21,240	●	●	○	○
Sca Property Group	15,263	●	●	○	○
BWP Trust	179	●	●	○	○
National Storage	-	●	●	○	○
Aveo Group	-	●	○	○	●
ISPT Pty Ltd	76,242	○	●	○	○
Viva Energy REIT	-	○	○	○	○
Toga Pty Ltd	57,956	○	○	○	○

THE ASSESSMENT IS BASED ON THE FOLLOWING CRITERIA:

●	Specific target that aligns with net zero greenhouse gas emissions before 2050. For example: <ul style="list-style-type: none"> + Efficiency: commitment to EP100 pathway or similar. + Renewable energy: commitment to RE100 or similar. + Electrification: 100% shift to electrification. + Non-energy: elimination or offsetting of 100% of non-energy emissions.
●	Activities flagged as supporting a pledge to achieve net zero greenhouse gas emissions before 2050.
●	Activities that will reduce greenhouse gas emissions but are not aligned with net zero before 2050 or associated with a net zero pledge.
○	Generic expression of intent or no information.

Next steps

The findings outlined in this report indicate that an influential portion of the Australian property sector has acknowledged the environmental, social and economic benefits of achieving net zero emissions before 2050.

The next step for property companies that have pledged to achieve net zero emissions before 2050 is to outline a detailed plan for the delivery of this target which addresses the full scope of direct and indirect emissions within the company's influence.

Aligning the entire Australian property sector with this goal requires more Australian property companies to adopt a net zero emissions by 2050 target. By making this a public pledge, Australian property companies can, through their example, also build momentum to achieve this goal Australia wide.



Appendix

COMPANIES AND DATA

The organisations considered by this analysis include:

- + Companies classified as “Real Estate” in the July 2019 ASX200 (which uses the Global Industry Classification Standard).
- + Companies which principally develop, manage or invest in real estate that met the reporting threshold under the NGER Act in 2017/18¹¹.

Twenty one organisations satisfied either one or both of these criteria. Three of these (Investa, ISPT Pty Ltd and Toga Pty Ltd) were not listed in the July 2019 ASX200.

Table 3 lists these companies, their principal activities and the data sources consulted for each one.

In addition to published pledges and targets that support a pathway to net zero greenhouse gas emissions, the analysis considered other commitments and initiatives that could reduce greenhouse gas emissions. Waste reduction or recycling targets not specifically targeting emissions reductions were excluded.

The Charter Hall Group is presented as one entity, despite the group and two of its subsidiaries (Charter Hall Retail REIT and Charter Hall Long WALE REIT) being listed separately in the ASX200. This is because the sustainability initiatives for all of these entities are defined at the group level. The market capitalisation figure for the Charter Hall Group presented in the findings is the sum of the individual market capitalisation figures for these three entities.

TABLE 03: COMPANIES AND DATA CONSIDERED BY THE ANALYSIS

COMPANY	PRINCIPAL ACTIVITIES	MARKET CAPITALISATION (\$M)	PLEDGE PLATFORMS	OTHER SOURCES	EMISSIONS DATA SOURCE
Abacus Property Group	Commercial property investment	2,380		Sustainability Report 2018	Sustainability Report 2018
Aveo Group	Residential property ownership and management	1,092		Annual Report 2018	
BWP Trust	Commercial property investment and management	2,364		Annual Report 2019	
Charter Hall Group	Commercial, social and residential property investment, management and development	8,589		Sustainability Report 2017/18	NGER 2017-18
Cromwell Property Group	Commercial property investment and management	2,583		Sustainability Report 2018 Climate-related Financial Disclosure Statement	2018 Data Pack
Dexus	Commercial and social property management Commercial property investment	14,237	SBTi EP100 WGBC	Sustainability Performance Pack 2019	NGER 2017-18

COMPANY	PRINCIPAL ACTIVITIES	MARKET CAPITALISATION (\$M)	PLEDGE PLATFORMS	OTHER SOURCES	EMISSIONS DATA SOURCE
Goodman Group	Commercial property ownership, management and development	27,263		Sustainability Report 2018	Sustainability Report 2018
GPT Group	Commercial property ownership and management	11,911	EP100 WGBC	GPT Website Environmental Data Pack 2019	NGER 2017-18
Growthpoint Property	Commercial property investment	2,999		Sustainability Report 2018	Sustainability Report 2018
Investa (ICPF)	Commercial property investment and management	-	SBTi	Sustainability Report 2018	NGER 2017-18
ISPT	Commercial and residential property investment and development	-		Beyond Financial Performance-Responsible Investment Series 2019	NGER 2017-18
Lendlease Group	Commercial and residential property investment and development	7,334		Sustainability Framework Lendlease Environmental Data	NGER 2017-18
Mirvac Group	Commercial and residential property ownership, management and development	12,242		Sustainability Report 2018 Planet Positive -June 2019 Annual Report 2019	NGER 2017-18
National Storage	Commercial property ownership, investment and management	1,179		Sustainability Report 2017/2018	
Sca Property Group	Commercial property ownership and investment	2,212		Sustainability Report 2019	Sustainability Report 2019
Scentre Group	Commercial and residential property ownership and management	20,417		Sustainability Report 2018	NGER 2017-18
Stockland Corporation	Commercial, social and residential property ownership, investment, management and development	9,943	EP100 WGBC	Sustainability Deep Dive Series FY19	NGER 2017-18
Toga	Residential property development, social property management, commercial and social property investment	-		TOGA Group 2019 Website	NGER 2017-18

COMPANY	PRINCIPAL ACTIVITIES	MARKET CAPITALISATION (\$M)	PLEDGE PLATFORMS	OTHER SOURCES	EMISSIONS DATA SOURCE
Unibail Rodamco Westfield	Commercial property ownership and management	3,294		Better Places 2030	
Vicinity Centres	Commercial property ownership, investment and management	9,241		Sustainability Reporting Criteria FY18 FY18 Sustainability Performance Pack Annual Report 2019	NGER 2017-18
Viva Energy REIT	Commercial property investment	2,017		VIVA Energy REIT- 2018 Annual Report	

PLEDGES AND COMMITMENTS

TABLE 04: EMISSIONS REDUCTION COMMITMENTS AND ACTIVITIES

COMPANY	EMISSIONS COMMITMENT	OTHER COMPANY COMMITMENTS/ACTIVITIES
Abacus Property Group	FY19 Target: Reduce energy consumption and emissions across its portfolio to 5% below the 2016 baseline (Achieved).	In its 2018 Sustainability Report, Abacus states that: It will seek to maintain or improve overall energy and water NABERS ratings across its office portfolio by investing in initiatives such as LED lighting, solar energy and other resource reduction opportunities. A scoping exercise is being conducted to assess the feasibility of integrating solar energy generation across its Australian storage, retail and commercial portfolio throughout FY19.
Aveo Group	N/A	In its 2018 Annual Report, Aveo states that: It is planning and building greener communities and adopting industry 6-star green rating initiatives. They are focused on investing in new energy efficient and smart technologies. Their future environmental sustainability goals include: increasing solar panel initiatives to offset power usage in its community centres; trialling electric shared vehicles to reduce the need for car use and parking spaces whilst reducing carbon emissions; upgrading to more energy efficient technologies that optimise power consumption, where possible.
BWP Trust	Its focus is on achieving outcomes to improve the energy efficiency of properties, and improve understanding, measurement and reporting of ESG issues.	In its 2019 Sustainability Policy, BWP states that: Property Improvements include: new energy efficient LED lights, which were installed internally in eight stores and; installations of solar power generation, bringing total installations to 13. They will continue a program for phasing out ozone depleting air conditioning. And will continue to work with major customers to roll out energy efficient LED lighting into existing properties as and when appropriate, and also to install roof based solar panels on buildings where the energy saving benefits are significant.
Charter Hall Group	Aspires to achieve net zero emissions.	In its 2017/18 Sustainability Report, Charter Hall states that: Since FY17 they have achieved a 1% reduction in emissions, through divestment from less energy efficient buildings; acquisition and development of more energy efficient assets; and base building energy efficiency upgrades. Since FY17, they have achieved more than a 2MW increase in solar installations across Australia, associated with retail and industrial developments. Future activities will align with its Science Based Targets pathway. They will achieve the equivalent of a 2-degree reduction in emissions by 2025. They will have “renewable energy creation in portfolio” by 2025.
Cromwell Property Group	Targeting net zero emissions for its corporate operations by 2022 and net zero for directly owned assets where it has direct operational control by 2050.	In its Climate Related Financial Disclosure Statement, Cromwell states that: Technical building audits identify targets to increase energy efficiency and reduce water consumption and emissions in buildings where Cromwell has operational control. Medium to long-term targets include a combination of ongoing investment to improve efficiency, increased investment in renewable energy and energy storage facilities, combined with increasing renewable energy and offsets to deliver net zero by 2050. The 321 Exhibition Street project included one of the first retrofitted gas fired cogeneration systems and delivered a 5.5-Star NABERS rating for energy performance, going on to achieve 6-Stars in operation. They are undertaking significant re-purposing projects for existing buildings. Re-purposing ageing buildings delivers a number of benefits. Amongst which is the reuse of the existing embedded carbon from construction.

COMPANY	EMISSIONS COMMITMENT	OTHER COMMITMENTS/ACTIVITIES
Dexus	Has set a goal to achieve a net zero position for all carbon emissions across the group's managed property portfolio by 2030.	<p>According to the EP100 website, Dexus joined through the Net Zero Carbon Buildings pathway, committing to achieve net zero carbon emissions across its managed property portfolio by 2030.</p> <p>In their 2018 Sustainability Performance Pack, Dexus states that: Improving energy efficiency is critical to the delivery of their targets. Their aim is to achieve up to 50% in savings by 2030.</p> <p>Their New energy, New Opportunities strategy sets a pathway for Dexus to achieve net zero emissions by 2030 through improving energy efficiency and increasing renewables.</p> <p>They will transition to all-electric buildings powered by new energy to replace use of fossil fuels.</p> <p>They will seek to reduce or eliminate emissions from operational waste and waste water generated within their buildings and reduce the emissions impact of refrigerants from air conditioning equipment.</p> <p>In their 2019 Sustainability Performance Pack, Dexus indicates it's committed to reduce energy consumption and emissions across the group by a further 10% by 2020 using the FY15 baseline, including exploring opportunities for renewables.</p>
Goodman Group	15% reduction of its corporate carbon emissions by FY22.	<p>In its 2018 Sustainability Report, Goodman states that: A further 10 MW of solar PV will be installed by FY22 to act on climate change. An additional one million sqm of space will be upgraded to LED lighting by FY22.</p>
GPT Group	GPT aims to reach its carbon neutral target before 2030 for all GPT Group assets and by the end of 2020 for all assets owned by the GPT Wholesale Office Fund.	<p>According to the EP100 website, GPT's Wholesale Office Fund joined through the Net Zero Carbon Buildings pathway, committing to owning only assets that are net zero carbon in operation by 2030. To meet this target, the fund has stated that it will build on its implementation of energy efficiency reduction measures, energy management programs and renewable energy procurement strategies.</p> <p>The GPT website states that GPT has achieved a commitment to provide carbon neutral workplaces by: improving the efficiency of its workspaces and utilising renewable green power; purchasing zero or low carbon products, especially Green Power and; using certified offsets as a last resort to compensate for unavoidable emissions. They state that for 2019 and beyond GPT will set targets for closed loop recovery, not diversion from landfill.</p>
Growthpoint Property	Net Zero emissions by 2050 across all properties under operational control. 100% reduction in Scope 1 and Scope 2 emissions by 2050 against a 2016 base year.	<p>In its 2018 Sustainability Report, Growthpoint states that: Energy efficiency of potential new acquisitions is a key consideration in its portfolio management decisions.</p> <p>Planned renewable energy projects are being investigated through FY19.</p>
Investa (ICPF)	Net zero emissions by 2040.	<p>On its website, Investa states that emissions reduction actions will focus on 3 key areas:</p> <ol style="list-style-type: none"> 1. Sourcing a zero-carbon option for residual power requirements. 2. Continuing to improve the operational performance of Investa's buildings. 3. Changing the building envelope to deliver further energy and emissions savings. <p>Investa's 2018 Sustainability Report states that in 2018 Investa offset 100% of its operational emissions via a Tasmanian biodiversity offset program and that they have extended an invitation to their tenants to offset their share of the base building emissions.</p>
ISPT	N/A	ISPT's Beyond Financial Performance Responsible Investment Series 2019 states that energy resource efficiency has long been a hallmark of ISPT's buildings. It indicates that ISPT's national solar photovoltaic (PV) project forms part of its broader program to reduce reliance on fossil fuels.
Lendlease Group	Net Zero Carbon in operation targets: 2021: Lendlease International Towers Sydney Trust (LLITST) – three assets; 2021: Lendlease One International Towers Sydney Trust (LLOITST) – one asset; 2021: Lendlease APPF Industrial - 33 assets; 2025: Lendlease APPF Commercial – 10 assets.	<p>Lendlease's website states that they are committed to reduce energy, water and waste usage by 20 per cent by 2020 and that Lendlease aims to:</p> <ul style="list-style-type: none"> Continuously improve their energy efficiency, use renewable energy and purchase carbon offsets Work with industry partners and suppliers to reduce embodied carbon in their materials and products Work with tenants to reduce carbon in operations.

COMPANY	EMISSIONS COMMITMENT	OTHER COMMITMENTS/ACTIVITIES
Mirvac Group	To achieve net positive carbon emissions by 2030.	Mirvac states in its 2019 Annual Report that their strategy involves maximising energy efficiency and building all-electric buildings powered by 100 per cent renewable energy. They indicate that 5MW of renewable energy will be installed by 2021 and 10MW of will be installed by 2023. Mirvac's 2018 and 2019 Sustainability Reports state that: The use of high-performance facades with shading and motorised blinds have been designed to make their buildings more energy efficient by reducing reliance on heating and cooling. They are implementing a highly-efficient precinct-wide solar PV solution. They anticipate that their CEFC partnership will enable them to install solar and battery technology in around 300 homes. They complete lifecycle assessments (LCAs) for all new projects (from June 2014).
National Storage	N/A	National Storage's 2017/18 Sustainability Report states that it will continue to implement solar and LED programs on all new acquisitions and developments to ensure continued focus on responsible energy management. In addition, their broader sustainability review will continue to identify opportunities for efficiencies in energy and water consumption across their portfolio.
Sca Property Group	Like-for-like energy consumption- 3rd year target: -4% Like-for-like GHG emissions - 3rd year target: -8%	Sca Property Group's 2018 Sustainability report FY19 commitments are to: Continue the program of performance improvement measures in centres. Integrate the deployment of LED lighting, building controls systems and solar energy generation at three centres. Deploy onsite solar generation to a further four centres, taking the total to seven installations.
Scentre Group	Reduce emissions intensity (based on gross leasable area) by 35% by 2025 (compared with 2009 baseline).	Scentre Group's website states that there are common initiatives that can be implemented across the portfolio to reduce energy usage and optimise operations, so each of their centres is operating as efficiently as possible. It indicates that during 2017, Scentre Group mandated the National Energy Efficiency Initiative, which is a strategy to increase energy efficiency in their operating assets. It also states that they have installed solar system, bringing their renewable generation capacity to 9 GWh per year.
Stockland Corporation	Committed to achieving net zero carbon by 2030 for Retirement Living and Industrial portfolios and Corporate Head Offices.	According to the EP100 website, Stockland signed up two of its divisions (Stockland Retirement Living and Stockland Logistics) to EP100 through the Net Zero Carbon Buildings pathway, committing to owning only assets that are net zero carbon in operation by 2030. To meet this target, Stockland plans to extend its existing rooftop solar program on its retail town centre portfolio to implement a logistics warehouse rooftop solar program. Stockland's "Carbon and Energy" report for FY19 states that they: Have invested in energy efficiency improvements across its commercial property developments and operations since FY09. Intend to install a further 12 MW of solar photovoltaic capacity across eleven retail town centres by the end of FY19. Will continue to roll-out solar installations to meet or exceed their target of five installations across clubhouses and community centres in their retirement living communities by FY20.
Toga	N/A	N/A
Unibail Rodamco Westfield	The Group's strategy is reducing its carbon footprint by 50% by 2030, in comparison with its 2015 level. Reduce emissions from construction by -35% by 2030.	N/A
Vicinity Centres	Net Zero emissions by 2030 for 100 per cent of their owned retail assets. Annual portfolio energy/carbon intensity reduction target of 3% (against FY18).	Vicinity's 2018 Annual report states that the organisation's FY20 focus will include completion of their solar investment program (stages 1 and 2 and launch stage 3). Vicinity's 2019 Annual report states that energy efficiency efforts have reduced carbon intensity by 19% since June 2016, which is over half of the total reduction required to achieve their Net Zero pathway.
Viva Energy REIT	N/A	N/A

ASSESSMENT OF EMISSIONS REDUCTION AMBITION

Table 5 details the assessment of emissions reduction ambition for each of the companies considered by the analysis.

THIS ASSESSMENT IS BASED ON THE FOLLOWING 6 CRITERIA:

EMISSIONS REDUCTIONS ACTIVITIES?	Indicates whether a company has a commitment or is undertaking activities that will reduce its greenhouse gas emissions. This criteria is informed by Table 2.
STRENGTH OF COMMITMENT	Indicates whether a company has an emissions reduction target, has expressed an emissions reduction aspiration, has no current emissions reduction target or aspiration, or no information can be found regarding an emissions reduction commitment.
NET ZERO TARGET OR COMMITMENT?	Indicates whether a company's emissions reduction target or aspiration is to achieve net zero emissions.
PATHWAY TO NET ZERO BY 2050?	Indicates whether a company is currently reducing its emissions on a pathway that aligns with net zero by 2050. Emissions were extrapolated as appropriate using SBTi's Absolute Emissions Contraction methodology ¹² . If a company has an emissions reduction target to achieve net zero emissions before 2050, it is assumed they are on a pathway to net zero by 2050.
SCOPE 1 AND 2 EMISSIONS FROM OWNED AND MANAGED ASSETS INCLUDED?	Indicates whether a company's emissions reduction commitments include scope 1 and 2 ^{iv} emissions from all of their owned and managed assets as a minimum. "Partial" indicates that a proportion of their owned and managed assets are excluded from their emissions reduction commitments.
ALL EMISSIONS INCLUDED?	Indicates whether a company's emissions reduction commitments address all emissions from their direct operations (scope 1 and 2), and whether they have observed current best practice to identify and address emissions from their value chain (scope 3) ¹³ .

BASED ON THE ABOVE CRITERIA, EACH COMPANY'S EMISSIONS REDUCTION AMBITION WAS ASSESSED AS FOLLOWS:

●	FULLY ALIGNED NET ZERO TARGET	The organisation has made a pledge to achieve net zero emissions before 2050. This pledge includes all of the direct and indirect emissions the organisation can influence.
●	CLOSELY ALIGNED NET ZERO TARGET	The organisation has made a pledge to achieve net zero emissions before 2050. This pledge includes scope 1 and 2 emissions from all owned and managed assets.
●	ALIGNED ASPIRATION/ PATHWAY	The organisation has an aspiration to achieve net zero emissions before 2050. This aspiration includes scope 1 and 2 emissions from all owned and managed assets. Alternatively the organisation has other targets or initiatives which align it with this pathway.
●	PARTIALLY ALIGNED NET ZERO TARGET	The organisation has made a pledge to achieve net zero emissions before 2050. This pledge includes only a portion of total scope 1 and 2 emissions from owned and managed assets.
●	NOT ALIGNED	The organisation has made a commitment, pledge or is undertaking activities that will reduce its emissions but not in alignment with net zero before 2050, or the alignment is unclear due to insufficient information.
○	NO EMISSIONS REDUCTION TARGETS OR ACTIVITIES	No disclosed emissions reduction targets, commitments or activities.

iv Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.

TABLE 05: ASSESSMENT OF EMISSIONS REDUCTION AMBITION

Company	Total scope 1 & 2 emissions (tCO2e)	Net zero Ambition	Emissions reductions activities?	Strength of commitment	Net zero target or commitment?	Pathway to Net Zero by 2050?	Scope 1&2 emissions from owned & managed assets included?	All emissions included?
Dexus	149,366	●	Yes	Target	Yes	Yes	Yes	No
Mirvac Group	79,454	●	Yes	Target	Yes	Yes	Yes	No
GPT Group	119,537	●	Yes	Target	Yes	Yes	Yes	No
Vicinity Centres	191,330	●	Yes	Target	Yes	Yes	Yes	No
Cromwell Property Group	-	●	Yes	Target	Yes	Yes	Yes	No
Investa (ICPF)	63,337	●	Yes	Target	Yes	Yes	Yes	No
Charter Hall Group	82,978	●	Yes	Aspiration	Yes	Yes	No	No
Unibail Rodamco Westfield	-	●	No	Target	No	Yes	Partially	No
Growthpoint Property	14,198	●	Yes	Aspiration	Yes	Yes	Yes	No
Stockland Corporation	108,451	●	Yes	Target	Yes	Yes	Partially	No
Lendlease Group	282,964	●	Yes	Target	Yes	Yes	Partially	No
Goodman Group	35,524	●	Yes	No current target or aspiration	No	No	Partially	No
Scentre Group	280,472	●	Yes	No current target or aspiration	No	No	No	No
Abacus Property Group	21,240	●	Yes	No current target or aspiration	No	No	No	No
Sca Property Group	15,263	●	Yes	No current target or aspiration	No	No	No	No
BWP Trust	179	●	Yes	No information	No information	No information	No information	No information
Viva Energy REIT	-	○	No	No information	No information	No information	No information	No information
National Storage	-	●	Yes	No information	No information	No information	No information	No information
Aveo Group	-	●	Yes	No information	No information	No information	No information	No information
ISPT Pty Ltd	76,242	●	Yes	No information	No information	No information	No information	No information
Toga Pty Ltd	57,956	○	No	No information	No information	No information	No information	No information

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WHAT IS THE NET ZERO MOMENTUM TRACKER?

Reaching net zero emissions is a core action of the Paris Agreement goal to limit global warming to well below 2 degrees Celsius and strive for 1.5 degrees. Many major global companies have incorporated this goal into their business strategies. In Australia, businesses and governments are doing the same, but there is no easily accessible place to assess these commitments, making them difficult to track.

The Net Zero Momentum Tracker tells the story of Australia's growing momentum towards net zero across key sectors in the Australian economy through a series of sector reports supported by an online platform.

WWW.NETZEROTRACKER.ORG

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ClimateWorks Australia is an expert, independent adviser, committed to helping Australia, South East Asia and the Pacific region transition to net zero emissions by 2050. It was co-founded through a partnership between Monash University and The Myer Foundation and works within the Monash Sustainable Development Institute.

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