

# Our Management Approach to Carbon and Energy

## A. Purpose

We have a long-standing commitment to manage climate change risk, and this document sets out our approach to mitigating climate change by managing energy use and reducing carbon emissions. It should be read in conjunction with our annual **Carbon and Energy Deep Dive** and our **Climate Resilience Deep Dive** (available on our [website](#)), where we report on progress against climate and community resilience priorities on an annual basis. Together, our management approach documents, deep dive reports and our data packs comprise our sustainability reporting suite, which is prepared in adherence to the International Integrated Reporting Framework principles of materiality, stakeholder responsiveness, reliability and completeness; in accordance with the GRI Standards<sup>1</sup>(Comprehensive); and is **third party assured**.

We recognise our capacity to enhance the energy efficiency of our assets and have taken a proactive approach to developing efficiency strategies that have generated value for our business while reducing our carbon emissions intensity.

The increasing cost of energy, particularly electricity, poses a challenge for the property industry and for all Australians. As electricity is an increasing proportion of our assets' operating expenditure, improvements in energy efficiency enable us to reduce cost and improve our operational efficiency. Integrating energy efficiency considerations into the design and construction of our assets can also help to reduce the energy requirements (and electricity costs) of our tenants and residents.

The increasing cost of power also means that renewable energy options such as solar have become cost-effective choices for our energy supply. The declining cost of solar infrastructure works in tandem with the increasing cost of conventional energy to make solar installations a sound business investment. We look to design and technology innovation and access to alternative energy supplies and product offerings to help our customers and us realise a cost-efficient, zero carbon future.

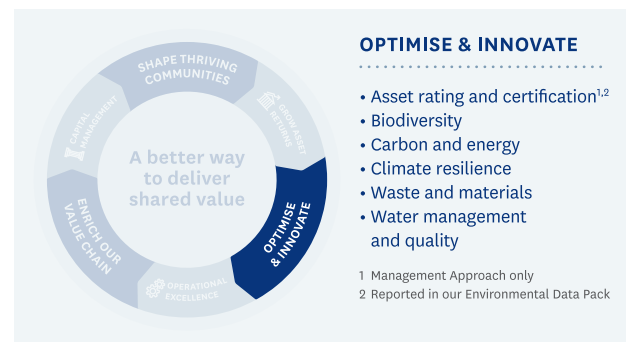
We are a signatory to the World Green Building Council's Net Zero Building Commitment, and have committed to a Net Zero 2030 future for our Retirement Living, Logistics and Corporate Head Offices.

Our management approach to carbon and energy recognises our capacity to both mitigate risks and take advantage of opportunities resulting from climate change.



For more information on our approach to managing climate risks and opportunities, including our alignment with the Task Force on Climate-related Financial Disclosures recommendations, please refer to our annual **Carbon and Energy Deep Dive** and **Our Management Approach to Climate Resilience**.

## Stockland's Sustainability Strategy



<sup>1</sup> The GRI Standards are global standards for sustainability reporting published by the Global Reporting Initiative (<https://www.globalreporting.org/standards/>)

## B. Management approach

---

### B.1 Overview

To complement our Group sustainability strategy, in 2006 we developed a Climate Change Action Plan to guide and integrate efforts across our business units. Our Climate Change Action Plan is regularly reviewed and refreshed to maintain our leadership in this space. The Climate Change Action Plan informs our approach in five key areas:

- monitoring emissions and energy use and streamlining reporting;
- reducing emissions through both direct control and influence;
- adapting to potential climate risks through research assessment and response (covered in detail in **Our Management Approach to Climate Resilience**);
- integrating innovative solutions into operations and development projects with suppliers (covered in detail in **Our Management Approach to Supply Chain**); and
- effectively communicating our position and performance.

This document sets out the targets that guide our carbon and energy initiatives and describes two key areas that focus our approach: energy efficiency and alternative energy.

### B.2 Energy efficiency

Our Group-wide focus on energy efficiency manifests differently across our Commercial Property and Communities business units. The approach also varies depending on different stages in a project's life cycle. Each business unit has its own specific sustainability policy. This outlines strategic initiatives, performance standards and specific requirements relating to energy efficiency and climate change mitigation to be considered in the design, construction and operation of projects and assets.

To effectively manage our energy efficiency performance, we employ evidence-based decision-making tools and certification. We use the CCAP Precinct data management system (explained in greater detail below) to assess and prioritise the energy initiatives that deliver the greatest emission reduction outcomes for the lowest cost in our Communities business. Within Commercial Property, we review projects at a project level against our financial hurdles.

We concentrate our energy and emissions reduction efforts where we can specify the built form, set reduction targets and performance standards. This applies largely in our Commercial Property business and increasingly in our Retirement Living portfolio.

#### Design

We use the Green Building Council of Australia (GBCA) Green Star rating tools to support the design and delivery of energy efficiency initiatives across our portfolio and to set a platform for optimal performance.

All new Retail Town Centre, Workplace and Retirement Living developments are required to achieve a minimum 4 Star Green Star certified rating, with a strong focus on energy efficiency. Retail Town Centre and Workplace redevelopments or extensions greater than 8,000 square metres are also required to achieve a minimum 4 Star Green Star rating, with a review of opportunities to stretch to 5 Stars. We target energy credits for greenhouse gas emissions, energy sub-metering and car park ventilation, and management credits for commissioning and building tuning. By committing to these minimum standards, we prioritise measures into design specifications that enhance operational efficiency.

For our new Workplace developments, we enter into a NABERS Commitment Agreement that sets a clear target for achieving a NABERS outcome. Early commitment in the schematic design stage allows the project design team to follow a protocol for modelling energy performance in operation and having this independently reviewed and optimised. Once only available for office developments, there are now protocols available to enter into Commitment Agreements for shopping centres, which will provide greater certainty on outcomes for our Retail Town Centre developments.

Within our built form product we have implemented minimum standards to help drive increases in energy and water efficiency. We use the Kinesis CCAP Precinct tool to support new project bids. CCAP Precinct is a leading industry recognised masterplan modelling tool that benchmarks projects against regional averages and helps us to establish built form targets against minimum building code requirements. The tool can be applied to masterplanned communities as well as smaller scale built form developments, such as retirement villages and apartments. Modelled outputs include estimated energy consumption and carbon emissions, water consumption, transport and associated cost estimates.

In our residential communities, where our customers generally select their own builders, we use masterplanning expertise to ensure residents can take advantage of passive design benefits such as orientation. We share best practice across projects in our internal knowledge base, Better Places Hub. We also seek to influence design choices through display homes and community hubs that feature sustainable design elements and tools to make homes more efficient. Since 2012 we have also used covenant requirements, such as our cool roof covenant, which applies to homes across our new Sunshine Coast projects. We have found that the benefits of cool roofs, including improved thermal performance, reduced heating and cooling costs and reduced urban heat island effect, come at no additional cost to build. In Victoria, we have partnered with the Victorian Government to build two Zero Net Carbon Homes in our residential communities to showcase the benefits of low carbon living.

## Development

Civil works on residential development projects constitute a major source of our emissions. Civil works contractors fall inside our operational control boundary, as defined by the National Greenhouse and Energy Reporting Act 2007 (NGER Act). Our civil contractors use heavy equipment to move large volumes of spoil across sites to achieve development and landscape levels. We work with our contractors to develop a bulk earthworks strategy for our sites with the aim of minimising vehicle movements on and off-site and around the site, which reduces emissions. As part of developing the bulk earthworks strategy, we also look across projects within a region and seek to understand where we have excess spoil and whether spoil can be diverted to another site to minimise the amount of soil that needs to be brought onto a project. This approach saves money, reduces our need for fill from distant sources, reduces the amount of earthworks required, and reduces the carbon emissions associated with the development.

Development activity in our Commercial Property business is not within our operational control boundary, as ultimate control of our Commercial Property developments lies with our principal contractors. As such, emissions from these developments are not captured in our annual reporting; however, we work with our contractors to identify and implement energy efficiency improvements. We continue to investigate methodologies to enable effective, meaningful and accurate intensity calculations in our Communities developments, as varied approaches across projects compromise consistent measurement.

Our design guidelines for our Retirement Living developments encourage reductions in energy use and emissions through maximising solar orientation, installation of energy efficient appliances, light fittings, hot water systems, LED and sensor activated lighting systems, and consideration of onsite renewable power generation (solar power). Our developments target Green Star ratings that have minimum energy performance criteria.

## Operations

In Commercial Property, we undertake NABERS Energy ratings to benchmark the performance of our assets against industry standards and to measure the effectiveness of the initiatives implemented. In Workplace and Business Parks, we complete NABERS ratings annually on all eligible assets within the portfolio. In Retail Town Centres, we complete NABERS ratings across eligible assets within the portfolio annually, with coverage increasing over the past five years.

We invest in energy sub-metering systems to monitor energy consumption in our Workplace, Business Parks and Retail Town Centre assets. Energy sub-metering is a key tool for us to manage consumption and is critical to our ability to achieve our targets. Using consultant partners, we monitor and analyse sub-metering data to provide useful information and insights to our operations management teams on where we need to target any efforts to reduce energy consumption.

Our approach to achieving carbon and energy objectives in our residential communities is primarily through influencing design and associated infrastructure, however we also work with local councils, state government and industry partners to deliver programs and initiatives within our communities on benefits of energy efficient practices and behaviours among residents

We have a greater level of control over energy outcomes in medium density, completed homes, and apartment products. In these instances, we embed initiatives into the homes that align with our carbon and energy targets and model the performance of the homes over time.

In our Retirement Living portfolio, we have operational control of our clubhouses and common areas. We have completed several night audits at select villages as well as monitoring energy and water usage at selected clubhouse and common areas. The insights from these reviews are helping us to target sustainability projects within our portfolio, including energy efficiency upgrades.

## B.3 Alternative energy

Our approach to alternative energy is focused predominantly on solar photovoltaics (PV) in our Commercial Property portfolio, though we have explored the use of wind and tri-generation at certain assets. We have been at the forefront of solar PV investment in the Australian property industry, having set up the then largest solar PV rooftop installation at Stockland Shellharbour in 2015 and commencing an industry-leading rollout of 16 MW solar PV capacity across 15 of our retail town centres in 2017 and 1MW of solar PV capacity across four logistics assets. We actively assess the most appropriate locations to roll out solar across the portfolio and focus on alternative energy initiatives that meet our return on investment hurdle.

We have solar PV installations on a large proportion of our retirement living homes. We continue to review different network ownership and management models to understand how solar PV can be adopted in our residential communities on a large scale. We also focus on building embedded energy networks across our retail town centres and retirement living communities. This enables larger installations to meet both base building and tenancy energy requirements, and enables us to reduce the cost of electricity for our tenants and gain visibility of asset-wide energy consumption data. We then identify further emission reduction opportunities and work collaboratively with our tenants to further reduce their energy costs in the future.

Similarly, for our residential communities, we look to raise awareness on the benefits of solar power through educational collateral and industry partnerships. This encourages the uptake of solar power as a means to help reduce ongoing electricity bills and dependence on grid-supplied power. In some instances, when we have needed to establish an onsite sales and information centre prior to services and infrastructure being available, we have piloted off-grid installations using solar and battery storage solutions as an alternative to fossil fuel powered generators for electricity.

## C. Review and evaluation of the management approach

---

We set targets and commitments to guide our approach to managing energy use and reducing carbon emissions.

We review and report on our progress against our carbon and energy commitments and targets as part of our annual **Carbon and Energy Deep Dive**. In this reporting, we include:

- a status update and progress against our short, medium and long-term targets;
- detailed commentary on the priority actions that contributed to the achievement of key targets;
- the identification of future priorities;
- highlights of initiatives implemented over the reporting period; and
- case studies that explore key achievements, usually at particular locations.

To evaluate the effectiveness of the management approach, we have a number of tools and checkpoints in place that allow ongoing, progressive energy performance tracking and review. Setting targets for performance and using rating tools in design and operation facilitates comparisons with benchmarks that can be tracked over time. With the assistance of sub-metering and monitoring, data capture and management systems, we can readily check our progress against targets and identify areas of divergence that may require focused attention.

We review the effectiveness of our approach to operational energy efficiency by preparing an energy efficiency evaluation for our Retail Town Centre assets. This considers the key financial metrics relating to energy efficiency and alternative energy investments, including the centre's capital expenditure investment, gross actual savings, gross return on investment (savings/capex) and net return on investment (savings/capex). This evaluation enables us to compare the actual project outcomes to those proposed and to use these findings to inform future investment decisions.

In addition to our annual sustainability reporting, we prepare regular reports of our progress to senior leadership teams and to our Board as a means of constantly reviewing our performance and providing opportunities for timely adjustments to the management approach if required. We also report our greenhouse gas emissions, energy production and energy consumption to the Australian Government annually, consistent with the requirements of the *National Greenhouse and Energy Reporting Act 2007*.

We engage with industry bodies such as GBCA, Property Council of Australia and other external stakeholders, to stay informed of current trends, material issues and industry benchmarks. We also regularly assess our performance against that of our peers.

## D. Responsibilities

Roles and responsibilities associated with delivering our approach to carbon and energy are described in the table below.

Role	Responsibilities
<b>Board Sustainability Committee</b>	Oversight of strategic approach to managing energy use and reducing our emissions, including targets and performance tracking
<b>Chief Financial Officer (CFO)</b>	Responsibility at a Group level for our strategic approach to managing energy use and reducing our emissions, including targets and performance tracking  Reports directly to Managing Director and CEO
<b>Executive Committee</b>	Supports delivery of our energy and emissions reduction strategy
<b>National Manager – Group Sustainability</b>	Strategic identification and evaluation of emissions reduction and alternate energy initiatives across our diverse portfolio of assets
<b>Development Managers and Asset Managers</b>	Effective management of energy and emissions at project and asset level
<b>Managing Director and CEO, CFO, business unit CEOs, Development Managers, Asset Managers, functional staff</b>	Meet key performance indicators relating to strategic energy and emissions reduction targets

## E. Version control

Revision	Published	Owner	Changes
1	September 2018	General Manager – Sustainability and Corporate Procurement	–
2	August 2019	National Manager – Group Sustainability	–
3	April 2020	National Manager - Group Sustainability	