



Environmental Management Approach



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This document details how Stockland responds to, manages and evaluates the following matters:

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ESG Management Approaches

Stockland publishes three management approaches covering the environmental, social and governance matters listed below.

Environmental Management Approach	Social Management Approach	Governance Management Approach
Climate, carbon and energy	People and culture	Governance and risk management
Water management and quality	Health, safety and wellbeing	Stakeholder engagement
Biodiversity	Customer engagement	
Resources and materials	Community investment and development	
Asset ratings and certification	Supply chain engagement	
	Human rights	

Stockland ESG reporting suite

Our ESG Management Approaches document should be read in conjunction with the FY23 Integrated Annual Report and ESG Data Pack. Together, these documents comprise our annual ESG reporting suite, which is third-party assured and adheres to the International Integrated Reporting Framework principles of materiality, stakeholder responsiveness, and reliability and completeness, the GRI Standards (Core)¹, and the Real Estate SASB Standards².

ESG Management Approaches - how we respond to, manage and evaluate our material ESG matters.

Integrated Annual Report - information about Stockland, our strategy, our integrated financial and non-financial performance, risk management, corporate governance, remuneration and our financial statements.

ESG Data Pack - comprehensive ESG data sets supporting our Integrated Annual Report, progress against year end targets, GRI and SASB references.

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

² The Real Estate SASB (Sustainability Accounting Standards Board) Standards are industry-specific standards to assist companies in disclosing financially material, useful sustainability information to investors ([SASB Standards](#)).

1. Climate, carbon and energy

1.1. Overview

Stockland's **Climate Transition Action Plan 2023** sets out our approach to identifying, assessing and managing climate-related risks and opportunities.

The Plan has been developed in alignment with the Taskforce on Climate-related Financial Disclosure recommendations and includes details on our:

- Carbon footprint (scope 1, 2 and 3 emissions)
- Science-based¹ carbon targets and decarbonization pathway
- Approach to climate resilience
- Climate risk management and governance
- Scenario analysis used to inform our Plan.

Published with our FY23 Corporate Reporting is Stockland's first Climate Transition Action Plan (Plan). The Plan outlines how Stockland is addressing climate change risk and opportunities and delivering on our purpose. Our Plan has been developed with reference to the Science Based Targets Initiative (SBTi) criteria and in response to the Task Force on Climate Related Financial Disclosures (TCFD). The Plan has received independent third-party limited assurance the scope and results of which are available on our website². Our roadmap for achieving our targets, the material assumptions, uncertainties and dependencies associated with those targets, are set out in the Plan. Progress against our Plan will be included in our Annual Report from FY24 onwards. A summary of where we have made our TCFD recommended disclosures is set out in the Table below.

In our Plan we have published our FY21 Scopes 1, 2 and 3 baseline and inventory for our business activities and targets. This has been calculated using the GHG Protocol, the most recognised global greenhouse gas accounting standard. The Protocol covers Scopes 1, 2 and 3 emissions and provides guidance on how to establish a boundary which accurately reflects the GHG emissions inventory of an organisation. We will report on our annual Scope 3 emissions in alignment with the GHG protocol and boundary established in our Plan from FY24 onwards. For information on our FY23 Scopes 1 & 2 emissions and the climate resilience of our portfolio please refer to our **ESG Data Pack**.

Recommended disclosures	Reference	Recommended disclosures	Reference
Governance		Risk Management	
A. Describe the board's oversight of climate-related risks and opportunities.	Plan - Governance	A. Describe the organisation's processes for identifying and assessing climate-related risks.	Plan - Risk Management
B. Describe management's role in assessing and managing climate-related risks and opportunities.		B. Describe the organisation's processes for managing climate-related risks.	
		C. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	
Strategy		Metrics and targets	
A. Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Plan – Decarbonisation Pathway; Climate Resilience; Scenario Analysis	A. Disclose the metrics used by the organisation to assess climate related risks and opportunities in line with its strategy and risk management process	Plan – Our Decarbonisation Pathway; Climate Resilience
B. Describe the impact of climate related risks and opportunities on the organisation's businesses, strategy, and financial planning		B. Disclose scope 1, scope 2, and, if appropriate, scope 3 greenhouse gas (GHG) emissions, and the related risks.	Plan – Our Footprint; ESG Data Pack
C. Describe the resilience of the organisation's strategy, taking into consideration different climate related scenarios, including a 2°C or lower scenario.		C. Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	Plan – Our Decarbonisation Pathway; Climate Resilience; ESG Data Pack

¹ Stockland's emissions reduction targets have been prepared by reference to criteria set out by the Science Based Targets Initiative (SBTi). The targets have been reviewed by Ernst & Young (EY), which has provided limited assurance in relation to their alignment with the published SBTi criteria. Stockland has also submitted its targets to SBTi for validation.

² The Basis of Preparation for our Climate Transition Action Plan including decarbonisation roadmap and its associated calculation methods were reviewed by EY as third-party assurers.



2. Water management and quality

2.1. Overview

This section sets out our approach to managing water in the development and operation of our assets.

Water plays an important role in making our communities and assets healthy, efficient and attractive places in which our customers want to live, work, shop and play. We recognise that water is critical for broader environmental health and social wellbeing, as well as being integral to the culture of First Nations peoples.

The availability of water in Australia is influenced by our variable climate, which can fluctuate between periods of water scarcity (often resulting in water restrictions during drought conditions) and severe flooding. Under climate change, the severity, frequency and duration of drought conditions are projected to increase, influenced by rising temperatures and changing rainfall patterns.³ Additionally, a warmer atmosphere is able to hold more moisture, which can lead to more intense and prolonged rain events, thereby increasing flood risk.⁴ Accordingly, we maintain a strong focus on water management and quality in the development and operation of our assets, including improving the quality of rainwater run-off leaving our project sites and downstream impacts on receiving water bodies, access to alternate water infrastructure and practical innovation to support more efficient water use.

Effective water management delivers significant benefits to the natural environment, to broader society and to our business by enabling performance and cost efficiencies. Our focus on water management acknowledges the financial costs associated with water consumption and the impacts of excessive consumption of water reserves, particularly in times of water stress. We also model the quality of stormwater that exits our developments as it discharges into surrounding areas and waterways, as we are of our responsibility to maintain quality and slow water flow.

2.2. Management Approach

2.2.1. Objectives

Overarching objectives for our management approach to water efficiency quality are to:

- deliver projects that minimise water use and work in a complementary way with local and regional water catchments
- pursue opportunities to implement holistic water cycle management systems within our developments, focused on wastewater and stormwater reuse, and minimising waste
- enable our customers and tenants to utilise rainwater and/or recycled water where available.

These objectives are integrated into our [Environmental Policy](#). Our water management approach varies across our business units because of the different opportunities that exist for us to influence different aspects during the development and subsequent operation of assets within each asset class.

The table below summarises our water management approach for each business unit.

³ CSIRO & BoM (State of the Climate 2018. <http://www.bom.gov.au/state-of-the-climate/State-of-the-Climate-2018.pdf>).

⁴ Climate Council (Everything you need to know about floods and climate change. <https://www.climatecouncil.org.au/resources/climate-change-floods/>).

Business Unit	Focus	Why?	How?
Commercial Property (Town Centres, Logistics and Workplace)	<p>Manage water consumption and enable operational efficiency across our Commercial Property assets.</p> <p>Inclusion of water efficiency objectives into developments.</p>	<p>Promotes more efficient operations, delivering cost savings to the business. Maintains the ongoing viability of our assets given the cyclical nature of water stress.</p> <p>Reduces waste water and improves availability of water supply.</p>	<p>We use Green Star – Performance and NABERS to benchmark water consumption and performance across our Town Centre, Workplace and, where relevant, Logistics assets.</p> <p>Our focus for Workplace and Town Centres has been primarily leak identification and consumption management.</p> <p>We integrate water-efficient design in our developments and major amenity upgrades using specified products and minimum standards to achieve Green Star ratings.</p>
Communities	<p>Construct and deliver high quality potable and non-potable water supply, while minimising water use in construction and operation through design, management and enabling operational efficiency.</p> <p>Contribute positively to the health of nearby catchments by designing and managing stormwater run-off and maintaining the quality of water that is released to the environment.</p> <p>Use of Water Sensitive Urban Design (WSUD) principles when designing the community.</p>	<p>Stakeholders such as local authorities and the general public expect water use and quality to be managed appropriately during development. Effectively integrating these aspects into the design and development of our communities facilitates project approvals and contributes to the protection and preservation of ecological values.</p> <p>Initiatives focused on water supply to our communities contribute to their resilience in times of water stress.</p> <p>Reduces the footprint of potable water supply and reduces costs to residents.</p> <p>Improves the liveability, aesthetic and biodiversity of the development.</p>	<p>We monitor water quality during both the construction and delivery of our projects.</p> <p>At all new approved Masterplanned Communities, we use Green Star to benchmark and test options for reducing consumption in the completed project.</p> <p>We have established water efficiency targets for our medium density developments using the CCAP Precinct tool.</p> <p>We promote and facilitate efficient water use practices and investigate the viability of the provision of lower cost recycled/alternative water supply options where feasible through economies of scale.</p> <p>We seek to mitigate the impact of our developments on natural ecosystems and water supplies through Water Sensitive Urban Design (WSUD) principles.</p> <p>We require WSUD on all new masterplanned communities developments.</p> <p>During works we utilize non-potable water wherever possible for activities like dust control and landscape establishment.</p>

Individual project teams consider and plan water management initiatives through the development of an environment plan or water strategy (for development projects), through the asset or capital expenditure planning process (for operating assets), or as part of an asset certification process (e.g. Green Star).

2.2.2. Design and development

We often utilise the Green Building Council of Australia (GBCA) Green Star rating tools to support the design and delivery of water initiatives and to set a platform for optimal performance. In Commercial Property, all new Town Centre and Workplace developments and redevelopments (excluding small refurbishments and extensions) are required to achieve a minimum 5 Star Green Star Buildings rating with a review of opportunities to reach 6 stars. In our Logistics developments, we target a minimum 4 star Green Star Buildings rating. Green Star sets minimum standards for water management and certification assists our assets in meeting our water management targets. We also collect data on water performance to understand opportunities for improvement.

Incorporation of water efficiency into the design of our Masterplanned Communities developments varies according to the opportunities presented by regulatory schemes administered by state and local authorities. All of our Masterplanned Community projects in New South Wales are BASIX compliant at a minimum, and water tanks are typically provided at homes we have constructed to supply a combination of irrigation and toilets. Also in NSW, the Gables has a wastewater recycling scheme installed for all homes primarily used within the home but also for open space irrigation.

In some projects in Queensland, we have mandated water tanks through a covenant placed on lots. In Victoria, many of our developments (including Cloverton and Highlands) are provisioned with reticulated recycled water to supply irrigation requirements at a minimum. In Western Australia, most of our water used on-site during construction activity is supplied via groundwater bores and managed through a water extraction licence. Efficient landscaping approaches, such as the use of native drought-tolerant plant species, are typically employed to reduce irrigation demand throughout our projects.

Australian regulatory processes require permission from government authorities to extract water from water bodies. These authorities determine the level of significance based on each development application. Developments are unlikely to gain approval if a water source is deemed to be significantly affected. Equally, regulatory processes do not allow water discharge into significant areas of biodiversity unless it is demonstrated that there will be no significant impact (and thus we do not report on bulk discharge separately). This is determined, monitored and enforced by the regulatory authority. As a minimum requirement for environmental approval on all projects, we reduce the pollutant load of any stormwater run-off before discharging water to receiving water bodies, and focus on compliance with applicable regulations regarding water discharge into waterways and significant biodiversity areas.

Water Sensitive Urban Design (WSUD) is also considered in our developments. WSUD achieves sustainable management of water in urban areas through integration with the urban design, and considers all of the elements of the urban water cycle including potable water, wastewater, rainwater, stormwater and groundwater. We have a mandatory requirement to meet minimum standards for WSUD across all our projects regardless of local requirements. Masterplanned Communities projects demonstrate what targets will be achieved and what actions will be taken as part of their specific environmental plan.



During construction, water is captured and reused on-site where possible. However, this is managed by the civil works contractor, which means we do not control the amount of water reused. While our principal contractors preferentially use recycled water, this can be "topped up" with mains or carted water, and metrics on these levels are not available. Therefore, we do not report the amount of water recycled within our Masterplanned Communities during construction.

2.2.3. Operations

In Commercial Property operations we undertake Green Star Performance ratings and NABERS Water ratings on our Town Centre, Workplace and Business Parks portfolio to benchmark the performance of our assets against industry standards and to measure the effectiveness of the initiatives and actions we implement.

We continue to install water sub-metering systems to monitor water consumption in our Town Centre and Workplace assets. These systems have improved clarity on where water is being consumed and assisted our asset management teams to rectify wastage more efficiently. We also employ building optimisation services with data analytics partners and monitor day to day consumption in reference to an ideal water consumption model. This analytics service allows us to quickly identify unusual consumption patterns, taking into consideration weather normalisation algorithms, and take action if a leak or tap left on is detected.

In our Communities portfolio we seek to promote water-efficient landscaping to enhance water efficiency in the day-to-day lives of our communities. Water-efficient landscaping can include the use of rain sensors that can be controlled remotely to operate a drip irrigation system, as well as specifying drought-resistant species for roadsides and parks, or artificial turf in lieu of lawns. Other water-efficient landscaping initiatives include drought-resistant species in residents' sales covenants, low or no-irrigation landscaping and water tanks or basins to service irrigation needs.

We generally transfer operational control (i.e. maintenance of public spaces) to local councils following project completion or as stages of our projects are completed. We sometimes collect water for reuse in watering and maintaining parks and public spaces, however, we do not record the total volume captured before handing over control to public authorities.

2.3. Review and evaluation

Our use of rating tools (e.g. Green Star, NABERS) enables us to evaluate our developments and operations against a benchmark for best practice, with our performance against this benchmark reviewed at re-certification (e.g. annually for NABERS).

On a day-to-day basis, our sub-metering, monitoring, data analytics and management systems enable us to identify areas of divergence that may require attention outside of the annual reporting cycle. We provide internal reporting of our progress to the Stockland Leadership Team and to our Board as a means of continuously reviewing our performance and enabling adjustments to our management approach as required. These adjustments are then incorporated in appropriate documentation that is reviewed annually.

We engage with industry bodies such as the Green Building Council of Australia, the Property Council of Australia and other external stakeholders to stay informed of current trends, material issues and industry benchmarks.

3. Biodiversity

3.1. Overview

This section sets out our approach to managing and conserving biodiversity where we operate.

We recognise the important role biodiversity plays in sustaining healthy ecosystems and supporting human health and wellbeing. We also understand the intrinsic value of biodiversity and the global significance of Australia's unique flora and fauna, as well as its importance to the culture of First Nations people. Our Liveability Index survey results tell us that our customers value green space and access to nature, so integrating developable land with conservation and the enjoyment of biodiversity is critical to the overall success of our Masterplanned Communities.

We recognise that our business both has impacts and dependencies on nature that could give rise to nature-related risks and opportunities. In line with the emerging policy landscape on nature, and the changing expectations of our stakeholders, we are taking steps to align our environmental management approach to the recommendations set out in the draft Taskforce on Nature-related Financial Disclosure (TNFD) framework across four key areas: governance, strategy, risk and impact management and targets and metrics.

3.2. Management Approach

3.2.1. Governance

We are working with our Board and Stockland Leadership Team to build understanding and engagement on nature and biodiversity issues, and greater management oversight of nature-related dependencies, impacts, risks and opportunities. Nature and biodiversity issues are considered at the Board level and our ESG Steering Committee meets regularly to consider nature-related developments in the business and to provide input into strategic decisions.

In addition, we are adapting our governance processes to embed nature considerations into our investment, procurement and design processes.

We have used a biodiversity calculator to assess the change in biodiversity value of our projects based on an initial pre-development value at a site. We developed the biodiversity calculator in FY15 to quantify the environmental impacts of our projects and measure whether we are delivering a positive contribution to biodiversity. The biodiversity calculator assesses pre-and post-development conditions to understand how development activities, rehabilitation achievements and conservation plans positively or negatively impact on biodiversity values. The calculator uses information on land areas, vegetation types and other attributes available in development planning documents.

The calculator's assessment of biodiversity value considers state and Commonwealth-listed threatened species, size and condition of the assets, likely impact and agreed offsets. In developing the calculator, we built on established methods used by the Green Building Council of Australia to measure changes in ecological value. Our calculator is currently under review to align it to emerging best practice and regulatory change.



3.2.2. Strategy

Stockland's nature strategy and roadmap for implementation have been developed on the basis of the insights from TNFD-aligned nature risk and opportunity assessments. We are taking action to mitigate potential risks and seize value creation opportunities for the business that have been identified as a result of our TNFD risk and opportunity assessment work.

We will continue to refine our strategy based on further risk and opportunity assessment work following the publication of the final TNFD framework in FY24.

3.2.3. Risk and impact management

Whole of business risks and impacts

As stated above, we are taking action to mitigate potential risks and identify value creation opportunities for the business that have been identified as a result of our TNFD risk and opportunity assessment work. These actions relate to the mitigation of both physical and transition risks in our direct operations and across our supply chains, as well as a coordinated approach to our investments in nature and biodiversity. For example, we will seek to manage our supply chain nature risks through embedding nature considerations into our investment and procurement processes.

Biodiversity outcomes associated with our developments

We develop land for housing, including infrastructure and social amenities, to create thriving communities. Development brings challenges and opportunities that we manage as we deliver our projects. In particular, developments on greenfield sites can impact threatened species and ecological communities.

Our overarching objectives for our management approach to nature and biodiversity associated with our developments are to:

- minimise our impact on threatened species and ecological communities,
- design communities to promote nature reserves and parkland,
- restore habitats and ecological communities, and
- make a net positive biodiversity impact

Our developments can maintain or enhance biodiversity through conservation, investment, secure ownership and ongoing management, especially when compared with the existing state of many pre-development sites. These sites are often degraded and held in private ownership with no certainty over restoration or conservation outcomes. When we develop a site, we aim to minimise our impact on threatened species and ecological communities. Where land is cleared, we will retain the remaining areas of biodiversity value in conservation zones in perpetuity, or secure biodiversity offsets off-site for the purposes of conservation and management.

Environmental management approaches

We will generally apply the mitigation hierarchy through our assessment and consideration of design and management options. The mitigation hierarchy includes 1) avoiding impacts, 2) minimising impacts, 3) restoring cleared or degraded areas and finally 4) offsetting impacts to our projects where we identify significant biodiversity. We will implement a range of programs to mitigate negative impacts and to deliver a positive overall contribution to biodiversity. These may include rehabilitation programs, on- and off-site conservation, the provision of research funding and the reversal of impacts associated with historical uses such as grazing. The company has a commitment not to operate in World Heritage areas and International Union for Conservation of Nature (IUCN) Category I-IV protected areas.

Factors that influence biodiversity impacts and management options vary across our development sites, and include:

- **nature of the biodiversity affected** – including the type of habitat, community or species, the size and quality of the habitat and the viability of bushland, waterway and open-space corridors adjacent to our site.
- **planning and design** – urban design considerations such as access routes, the location of town centres, public open space, public transport options (both proposed and existing) and the required lot size to enhance the viability and liveability of the development. Additionally, we try to avoid biodiversity islands by ensuring species can move across our developments to neighbouring areas, retaining access to habitat. These decisions can impact the location of infrastructure and housing and therefore biodiversity conservation on a project site.
- **ongoing management** – ownership opportunities and responsibilities beyond the development phase of the project. It is important that if decisions are made to protect long-term biodiversity in urban areas, appropriate ownership models are agreed, such as public ownership by a local council or state governments, private ownership options such as Biobanking, planning instrument protection such as environmental protection zones, and best practice management considerations such as weed removal, appropriate fire regimes, fencing and feral animal control.

We use a range of mechanisms to protect land containing biodiversity including:

- the creation of parks and dedicated conservation reserves
- the preparation of Biodiversity Management Plans
- covenants on titles where areas of significant ecological value are located on allotments
- conservation zoning and transfer of land to councils and/or public authorities

- private ownership and management agreements including conservation covenants, Biodiversity Stewardship Agreements (NSW) or Bush Forever Sites (WA)

The potential for our activities to affect threatened species and their habitats is considered as part of the environmental approval process on each development. In many cases, we are able to conserve local biodiversity and place most or all of the significant species found on our sites into protected areas. These are integrated into protected area estates managed by local or state-level agencies, which are then available to the community and managed for conservation in perpetuity.

We engage construction contractors on the basis that they deliver on biodiversity objectives, including any actions stipulated in project approval conditions. We manage contractors through regular site meetings and reporting to facilitate compliance with biodiversity conditions.

Environmental management approaches

Biodiversity management actions, including any actions stipulated as part of a development approval from any level of government, are integrated into development plans for each site.

Projects with significant biodiversity are required to prepare a Biodiversity or Vegetation Management Plan (BMP or VMP), which identifies areas of biodiversity to be conserved or offsets to be provided. It also provides details relating to the rehabilitation or revegetation and protection of biodiversity and the provision of funding to enable appropriate management of protected areas over the long term. The timing of the BMP development relates to the conservation objectives specific to that site, noting that this can occur at any stage throughout the development life cycle.

We partner with environmental and community groups to deliver on activities committed to in BMPs, such as tree planting, weeding and education programs.

3.2.4. Targets and metrics

Our goal is to better understand nature and biodiversity in the locations where we operate and to implement protection, management and enhancement initiatives as appropriate. We review and evaluate our performance in our Annual Report and ESG Data Pack.

We collect data and other reporting content associated with biodiversity from project teams. The information collected generally relates to progress against biodiversity management objectives, with the exact themes varying depending on the project's stage in the development life cycle. For example, at the masterplan completion stage, projects report on expected impacts and management planning. During construction, reporting focuses on the delivery of management actions.

In FY23, Stockland completed a review of how we measure positive and negative impacts on biodiversity associated with our developments. The review found that there have been advances in relation to the quantification of biodiversity outcomes since Stockland first deployed its proprietary biodiversity calculator in 2015. Following this review, Stockland has started work on the development of an updated calculator and approach to tracking biodiversity outcomes associated with our developments.

Stockland is also a member of the SBTN (Science Based Targets for Nature) Corporate Engagement program.

4. Resources and materials

4.1. Overview

This document sets out our approach to resource management and materials use across our business, laying the foundations to implement circularity within our development and operations.

We acknowledge that the development and operation of buildings account for large quantities of waste and material usage, which we can manage to minimise negative impacts.

Waste treatment and disposal can have a major impact on the surrounding environment. Examples include the nutrient pollution of groundwater and waterways, air quality issues from incineration and greenhouse gas emissions from landfills. We take these impacts seriously and are committed to managing our waste efficiently. We seek to reduce, reuse and recycle our waste whenever feasible, minimising our contribution to landfill.

We equally acknowledge that the use of virgin materials can have significant impacts on the environment and human health. By specifying the use of ecological and health-preferable materials and recycled materials in our developments, we are able to deliver tangible environmental, social and business benefits to communities.



4.2. Management Approach

4.2.1. Objectives

Overarching objectives for our management approach to waste and materials are to:

- reduce, reuse, recycle and repurpose waste in our developments and operations, minimising our contribution to landfill
- use ecologically-preferable materials.

The materials and equipment we use within our assets have a significant bearing on the capital cost of our projects and on the operating cost and efficiency of the assets we own and manage, along with the carbon footprint of our activities. We therefore endeavour to control aspects of the material supply chain by specifying the minimum sustainability requirements wherever possible.

We have a national approach to waste management for each asset class under which waste is appropriately segregated, stored and disposed of in accordance with regulatory requirements. Waste and recycling management plans are prepared for each asset, both in operation and in construction, to successfully manage the environmental impacts associated with the production and disposal of waste. The plans outline the waste and recycling systems we employ at the asset for the disposal of waste produced during operation or while in development.

Key objectives for the waste and recycling management plans are to:

- reduce the amount of general waste produced by office tenants, retailers, contractors and customers, and encourage greater levels of recycling
- implement management systems to measure, record and monitor waste and recycling at the asset
- continuously improve on these metrics and benchmark against other assets
- provide training and education for tenants, contractors and our employees, promoting good waste-management habits.

In addition to general waste management, our sustainability guidelines for each business unit outline the minimum standards and requirements with regards to waste diversion. These guidelines also set minimum requirements for asset performance and natural resource consumption during the life of the asset, which further minimises wastage.

4.2.2. Development

Materials

In addition to general waste management, our sustainability guidelines and related standards guide materials selection in our development projects. We also use the Green Star rating tool, which helps us assess the sustainability credentials of materials such as timber, steel, concrete and PVC.

Materials-related credits within Green Star aim to improve the environmental impacts of building products and materials by taking into consideration issues pertaining to the lifespan, life cycle, procurement and end-use of these resources.¹ These credits reward points based on numerous factors including chain of custody, embodied carbon savings, the recycling and reuse of building materials, the quantity of waste sent to landfill, the specification of healthier materials, and the use of recycled content materials in development.

All new Town Centre and Workplace developments and redevelopments (excluding small refurbishments and extensions) are required to achieve a minimum 5 Star Green Star Buildings rating with a review of opportunities to stretch to 6 Star. We produce sustainability plans for development projects across these business units to set the minimum design standards for our projects that our contractors must comply with. The sustainability plans form part of the tender documents and specify minimum material requirements to achieve the Green Star rating. Contractors are required to submit their design to Green Building Council of Australia (GBCA) for assessment and certification. We also engage directly with contractors regarding their adherence to sustainability plans throughout development. Upon project completion, the contractor is required to submit the project for a Green Star rating.

¹ Green Star Design & As Built v1.2 Submission Guidelines

Materials selection and use across the business is governed by our Materials Schedule, which provides guidance to projects and suppliers in selecting materials in accordance with our sustainability policy. The materials schedule provides a consistent approach to materials selection and use across the business. The schedule is intended as an overview of the key requirements for projects to encourage environmentally responsible actions, and will assist projects to select materials that:

- avoid pollution
- are safe and contribute to healthy environments for humans and ecosystems
- are responsibly sourced or have a sustainable supply chain
- are produced sustainably and transparently
- are recycled or reused
- have low embodied carbon
- avoid resource depletion.

We have identified high-impact and common materials and issues for inclusion in this materials schedule, however, we encourage project teams to also identify further sustainability initiatives during the materials selection process.

In addition to working with our suppliers in relation to development and construction work, we undertake comprehensive due diligence for all new real estate acquisitions, including in relation to construction materials. We have been responsive to new and anticipated legislation relating to façade cladding on our existing asset portfolio and we continue to follow the state-based registration process while keeping abreast of any legislative changes.

We encourage contractors to reuse, recycle and repurpose materials wherever practical.

Waste management

Our development projects set minimum construction and demolition management requirements in line with Green Star requirements to encourage practices that reduce the environmental impact of waste.

Minimum standards for construction waste recycling are outlined in our development contracts and aligned to core Green Star commitments. Our standards align with Green Star commitments by either targeting waste diversion as a minimum of 90 per cent of total waste generated or by setting a bespoke target of waste diversion compared to a reference building, as stipulated by the Green Building Council of Australia. Given recycling rates can vary from project to project depending on the types of materials recovered during demolition or used during construction, we set targets on a project-by-project basis depending on the predicted mass of waste being generated.

For small redevelopments where we typically do not pursue a Green Star rating, we establish a Green Plan for the project that adopts a number of sustainability design initiatives and targets for the project based on Green Star criteria. We will set a minimum construction waste landfill diversion target of 80 per cent for these small projects.

We require that contractors comply with all relevant environmental protection legislation, including contamination and waste dumping. Contractors are required to provide a strategy during the tender process to outline how they will meet the minimum requirements, and during the construction period contractors submit documentation to Stockland to validate their adherence to these standards. Our construction contracts in each of our business units require that an Environmental Management Plan (EMP) be developed by the relevant building contractor so that construction activities reflect the vision and design requirements and respond to policy and regulation appropriately. In addition, all of our contractors on projects seeking a Green Star rating with contracts over \$5 million (for Green Star Communities) or \$10 million (for Green Star Buildings) are required to have a valid ISO 14001 Environmental Management System accreditation prior to and throughout the duration of the project contract.

For our Commercial Property developments, we require the provision of suitable areas for tenant recycling facilities and encourage and support retailers undertaking a tenancy fitout in shopping centres to recycle as much of their construction waste as possible, as outlined in Stockland Tenancy and Delivery Guidelines.

We collect waste data from our Commercial Property and Communities development contractors to help us better understand the volumes of waste from our sites that are sent to landfill and/or recycled.

4.2.3. Operations

Materials

The most significant opportunity we have to influence the materials used in the operation of our business is in our Commercial Property business, most specifically our Town Centre portfolio. We are constantly exploring opportunities to enhance the materials used in the operation of our Town Centres to improve efficiency, enhance performance and minimise impacts on the environment.

We also engage with our tenants to improve the sustainability of materials used in our portfolio. For Workplace and Town Centre tenancy fitouts, we have specific guidelines for materials selection, set out in our Green Office Fitout Guide and the Retail Design and Fitout Guide. Our Workplace, Logistics and Town Centre leases contain clauses that encourage tenants to implement fitouts in line with these guides.



Waste management

We set minimum waste recycling targets for the operation of our Commercial Property business where we have a high degree of influence to help reduce waste and manage the use of materials. We have incorporated new waste reporting criteria into our waste contracts and adopted requirements from the Better Business Partnership (BBP) Operational Waste Guidelines into our waste and recycling contract specifications, which will be a significant step towards providing more accurate data on waste recovery and disposal. This improved accuracy will allow us to better understand how waste is being managed and therefore develop appropriate strategies to increase diversions.

We work towards our business unit targets by setting specific diversion targets (a percentage diversion from landfill) for each Commercial Property asset to facilitate achievement of our overall waste and recycling goals each year. We also require colour-coded signage on mall waste bins in our Town Centres, as well as in loading dock areas. We do not set targets related to total waste generation because levels of waste are directly correlated to levels of visitation, which is not within our direct control. We continue to explore opportunities for more effective disposal of organic waste across our Town Centre portfolio.

In our Land Lease Communities, residents' homes are generally serviced by local council waste services. Residents are encouraged to use the recycling options provided and we continue to explore options with the waste contractors that service our clubhouses to improve waste reporting.

4.3. Review and evaluation

We review and report on our progress against our waste management and materials targets in our [Annual Report](#) and [ESG Data Pack](#).

We continue to monitor industry standards regarding waste management and material specification and to identify best practice processes and procedures across our asset classes.

We stay informed of material and waste innovations for use in the design, development and operation of our assets, and also collaborate with industry partners to identify, develop and/or trial innovative materials.

We engage with our development contractors to confirm their adherence to the sustainability plans, their use of specified sustainable materials, and to identify improvements to their construction waste management approach. Contractor compliance with our sustainability and materials requirements is monitored via our quality assurance processes.

During the tender phase, contractors provide a strategy outlining how they will meet the specified minimum waste management requirements. During the construction period, contractors submit documentation to us to validate their adherence to these standards. Upon the completion of Green Star projects, the contractor is required to submit the project for a Green Star rating. Materials attributes are also considered within Green Star Communities.

5. Asset ratings and certification

5.1. Overview

This section sets out our approach to the use of rating and certification schemes, which are important means of assuring and demonstrating the quality of our projects and assets.

Asset ratings serve as independent validation that key sustainability aspects, including social and environmental factors, have been considered in our project and asset designs, developments and operations. Rating and certification schemes also enable us to demonstrate compliance with state and national regulations, benchmark our sustainability performance against our peers and regularly track and improve our performance across our various asset classes.

Assets that are highly rated and can demonstrate optimal performance are often more attractive to customers and investors. Not only do they deliver a certain level of energy and water efficiency, and therefore cost savings over the long term, they also incorporate various design features that promote social inclusion and enhance health and wellbeing. Buildings with high environmental ratings often demonstrate higher return on investment over time.¹

5.2. Management Approach

The table below lists the key rating and certification schemes that we use and how they are applied across our portfolio. The requirements for achieving ratings and certifications are embedded in our strategy, targets, policies and toolkits to assist decision making as appropriate. . Additional ratings and certification schemes are periodically explored on individual projects.

¹ Green Building Council of Australia, Value of Green Star – A decade of environmental benefits, May 2013. This was verified by the 2015 Property Council/ /IPD Australia Green Property Index

Rating/ Certification Scheme	Stage of Life Cycle	Asset Class
Green Star	Design, Development, Operations	Logistics and Workplace, Town Centre, Masterplanned Communities
NABERS	Design, Development, Operations	Workplace, Town Centre
NatHERS and BASIX	Design	Masterplanned Communities
Livable Housing Australia	Design, Operations (Land Lease Communities)	Masterplanned Communities, Land Lease Communities
WELL Health and Safety	Operations	Workplace, Town Centre

5.2.1. Green Star

Green Star relates to a suite of independent certification schemes developed and administered by the Green Building Council of Australia (GBCA), which is a not-for-profit industry association. Green Star is a national and voluntary rating system for buildings and communities designed to drive the adoption of sustainable practices in the Australian property industry.

Green Star Buildings assesses the sustainability outcomes from the design, construction and operation of new buildings or major refurbishments across a range of criteria. We require our new Commercial Property Workplace, and Town Centre developments and redevelopments to achieve a minimum of 5 star Green Star Buildings certification with a review of opportunities to stretch to 6 stars. We require our new Commercial Logistics developments and redevelopment to achieve a minimum of 4 star Green Star Buildings certification. Rating requirements are integrated into design briefs and contract documents.

Green Star Performance assesses the operational performance of buildings. We have used Green Star Performance to benchmark the performance of our Town Centre and Workplace portfolios. Our Green Star Performance ratings also enable us to develop asset strategies for improving performance over time. We renew Green Star Performance ratings ahead of the expiry of the three-year performance rating period.

Green Star Communities assesses the planning, design and construction of large-scale development projects at a precinct, neighbourhood or community scale. We use Green Star Communities in our Communities portfolio to independently verify our leadership in delivering sustainable Masterplanned communities.

5.2.2. NABERS

The National Australian Built Environment Rating Scheme (NABERS) is a national rating system that measures the environmental performance of Australian buildings, tenancies and homes in occupancy. It uses measured and verified operational performance data to assess the energy efficiency, water usage, waste management and indoor environment quality of a building or tenancy and its impact on the environment. This performance is converted into a rating scale of 1 to 6 stars, with 6 being market-leading performance. NABERS ratings are valid for twelve months.

We undertake NABERS Energy and NABERS Water ratings annually on the base building across Workplace and Town Centre assets, with tenancy ratings only undertaken on office tenancy space that we occupy. Under the Commercial Buildings Disclosure Program, building owners are required to communicate their NABERS rating if advertising to sell or lease office space of 1,000 square meters or more.

For our new Workplace and Town Centre developments, we enter into a NABERS Commitment Agreement, which sets a clear target for achieving a NABERS rating outcome from the design of new buildings. Early commitment in the schematic design stage allows the project design team to follow a protocol for modelling energy performance in operation and for having this independently reviewed and optimised. A strict energy monitoring and building tuning program, once in operation, provides greater certainty for achieving the target rating sometimes several years after the project is initially designed. Our minimum target rating for new Workplace and Town Centre developments is 5 stars with a review of opportunities to stretch to 5.5 stars.



5.2.3. NatHERS, BASIX and iCIRT

Both the Nationwide House Energy Rating Scheme (NatHERS) and Building Sustainability Index (BASIX) are rating schemes applicable to dwellings. NatHERS provides a streamlined pathway to meet or beat the new National Construction Code (NCC) 2022.

NatHERS is a national framework developed for regulating the classification of Australian homes for their thermal performance, and provides energy ratings for new dwellings. This helps to create energy efficient, resilient and comfortable homes that cost less to run. NatHERS has been upgraded and can now rate the energy performance for the whole home, including the major appliances, solar panels and batteries, in addition to the star rating for the building shell which looks at improving thermal performance for comfort and energy efficiency.

The NatHERS rating scale is from 1 to 10, with 10-star rated homes being the most thermally efficient and having minimal heating and cooling requirements. We work with builders to build homes that go beyond the minimum rating mandated by governments across Australia.

Each state in Australia has minimum standards around thermal performance based on specific NatHERS ratings. NSW is different in that it uses BASIX (Building Sustainability Index) as a measure of energy use in the home; however, thermal performance forms a part of a BASIX rating. We use these regulations as well as other state-based building requirements as benchmarks for our sustainability targets and initiatives. The new National Construction Code, once adopted by each State, has raised the minimum level of NatHERS rating from 6 to 7 stars. Our FY22 targets set requirements to exceed NatHERS ratings and we are reviewing these in light of the new NCC requirements to benchmark our minimums.

The independent construction industry ratings tool (iCIRT), provided by Equifax, provides a star rating outcome on an entity's capability and willingness to deliver reliable and trustworthy built assets. Stockland has attained an iCIRT 5 Star Gold and was assessed as being Better than Industry Average. As a Gold Star Rating this signified Stockland has participated in an open and transparent and auditable process.

5.2.4. Livable Housing Australia

Livable Housing Australia (LHA) maintains a voluntary three-tier performance range for liveable housing design: Silver, Gold and Platinum. The LHA certification promotes the development of safer, more comfortable and easier to access homes for everybody and can add to the long-term value of homes in our communities. The Livable Housing Design Guidelines describes 16 easy living design elements based on simple principles, such as the minimum width of corridors and more generous bathrooms. Each element details the performance expected to achieve Silver, Gold or Platinum level accreditation. LHA issues the Livable Housing Assessment Certificate of Compliance and awards a performance level to accredited building projects that are assessed at the Design & As Built stages of development.

As the largest residential property developer in Australia, with an overarching commitment to liveability, we use LHA guidelines to improve industry standards and to deliver liveable communities. We are committed to all sustainability hubs in our communities being constructed to a minimum LHA Silver level, and increasing the number of homes constructed to Silver level standards in our display villages, Land Lease Communities, and medium density and completed homes projects.

5.2.5 WELL Health and Safety

To prepare for the return of customers and tenants to Workplaces and Town Centres after COVID restrictions we implemented WELL Health and Safety Ratings to instil confidence in the safety and cleanliness of Stockland places. WELL Health and Safety ratings are, an evidence-based, third-party verified assessment that focuses on operational policies, maintenance protocols, emergency plans, and stakeholder education and engagement.

To obtain a WELL Health & Safety Rating, Stockland assets are assessed on a minimum of 15 features. Each of these features requires constant monitoring and action to meet the specific criteria set out by the International WELL Building Institute. The features Stockland has achieved in its ratings to date have included the provision and promotion of health and wellness benefits and practices, cleaning practices, management of mould and moisture, ventilation, air and water quality monitoring, and the development of plans across legionella management, emergency preparedness and health re-entry as well as business continuity plans.

Stockland was the first Australian property group to obtain the WELL Health and Safety Rating in the retail sector. These ratings are reported in our ESG Data Pack.

5.3. Review and evaluation

We regularly review the commitments and targets that guide our NABERS ratings and LHA certifications to focus our investment in performance improvements across our portfolio. We report on asset ratings and other certification achievements across our portfolio in our [Annual Report](#) and [ESG Data Pack](#).

The use of rating and certification schemes, as well as commitments or targets related to the schemes, are reviewed along with the review of our performance. We are corporate members of the Green Building Council of Australia, which provides us with insight into the review and evolution of Green Star rating tools and other industry trends in asset rating and certification. We also work closely with the NABERS administration team on developments and improvements to the NABERS suite of rating tools.

6. Responsibilities

Roles and responsibilities associated with delivering our approach to environmental management are described in our [Governance Management Approach](#).

Important notice

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