

### 1. Introduction

This document forms part of our Disclosures on Management Approach (DMA) series, prepared in accordance with the Global Reporting Initiative's G4 Guidelines. The DMA series is designed to support and complement our annual corporate reporting by providing a detailed overview of our approach to managing key sustainability issues of significance to our business, our industry and our stakeholders (see Appendix A). The series will be reviewed annually, with performance updates and progress against targets disclosed each year as part of our sustainability reporting process.

### 2. Climate Resilience

The Intergovernmental Panel on Climate Change's Fifth Assessment Report (IPCC AR5) states, with very high confidence, that the main potential risks for people, assets, economies and ecosystems due to climate change are, depending on geography, heat stress, extreme precipitation, inland and coastal flooding, landslides, air pollution, drought and water scarcity in urban areas. The IPCC AR5 also states that these risks are amplified for those lacking essential infrastructure and services or living in poor quality housing and exposed areas.

Future climate change impacts will place greater demands on our assets and communities and influence the actions and behaviours of our stakeholders. Extreme weather events have the potential to damage our assets and disrupt operations, and also to impact the health and wellbeing of our customers and communities.

For the benefit of our stakeholders, and society more broadly, we are committed to creating climate-resilient assets and communities that can endure severe weather impacts and operate without disruption. Understanding where events are likely to occur and how well our assets and communities are able to respond, enables us to improve the resilience of our assets and reduce risk to business continuity. It also potentially reduces the risk to human life and community safety.

By maintaining an active focus on climate change adaptation and resilience we are able to:

1. **Understand** future climate trends and predictions;
2. **Identify** where we are exposed to the impacts of climate change in different regions where we operate; and
3. **Take action** to address vulnerability in the short term, and develop plans to improve resilience over the long term.

Our ability to understand and effectively respond to current and predicted climate:

- Minimises the increase in operation and maintenance costs;
- Enables informed decisions to be made regarding future investments;
- Reduces liability and insurance premiums by ensuring assets are climate change-prepared;
- Increases customer comfort levels within our assets; and
- Helps maintain longevity of assets within our portfolio.

### 3. Management Approach

Extreme weather events may potentially damage assets and bring about potential losses. For this reason, we have included climate change risks and the potential financial implications in our enterprise risk framework. By implementing initiatives that improve the resilience of our assets, we reduce the risk of business disruption to our customers and residents, and mitigate potential future costs associated with maintenance, upgrade and emergency response initiatives across our assets. This contributes to our competitive position as a leading creator of places that meet the needs of our customers, as well as our ability to deliver greater returns in the medium to long-term.

Our Climate Change Action Plan articulates our overall approach to climate change and outlines our response to addressing vulnerability and resilience in exposed regions. Consistent with our Group-wide management approach, minimum performance standards have been included in our Sustainability Policy and supporting sustainability toolkits for each of our business units.

The Policy sets the requirements for climate resilience in the design, development and operation of our communities and assets and the toolkits help our communities and assets move beyond minimum standards. We also ensure the inclusion of climate resilience improvements across our assets in the annual capital expenditure allocation and budgeting program.

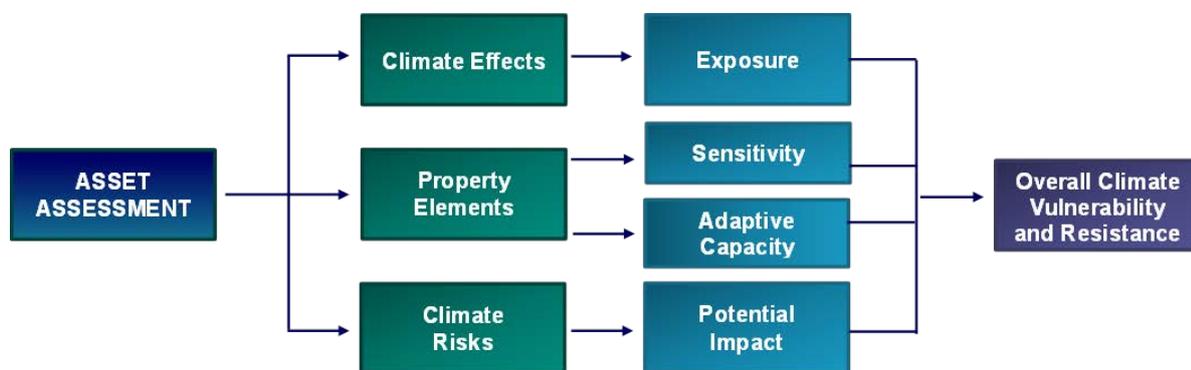
Our climate resilience approach aims to increase our understanding of future climate impacts on our business and identify what we need to do to create resilient communities and assets of the future. Over time we seek to further integrate climate resilience into all key business decision-making processes, with criteria set for the design and construction of buildings and neighbourhoods. We are also increasing our focus on climate change in the prioritisation of risks and opportunities at a Group, business and asset level.

In 2011, we developed a climate adaptation strategy in collaboration with Manidis Roberts, which included a methodology to assess the vulnerability and resilience of our assets to climate change (see Figure 1). These assessments focus on the vulnerability of the asset to climate and its ability to endure severe weather impacts and operate without disruption. As outlined in Figure 1, the methodology defines key vulnerability and resilience criteria, with a particular focus on location and design, structure, operation and maintenance, utilities and services and stakeholders. These attributes are assessed for their exposure to Climate Effects, Property Elements and Climate Risks, and assigned a resilience score.

'Climate Effects' relates to the degree of exposure a building has to weather events based on its geographic location, such as North Queensland where there is a high exposure to cyclones. 'Property Elements' are the physical and operational attributes of a building that make it vulnerable or resilient to those climate effects, such as box gutters that do not cope with high volumes of stormwater. 'Climate Risks' are the potential impacts of weather-related events on a building based on its location and attributes, such as loss of trade due to local flooding or air conditioning failure on hot days.

To date, we have completed assessments on 17 retail and office assets, three residential and three retirement living assets.

Figure 1: Asset Climate Resilience and Vulnerability Assessment Methodology



In Commercial Property, we have a comprehensive portfolio-wide approach to assessing and managing the physical risks of climate change through our climate vulnerability and resilience assessments. We select assets that are located in vulnerable regions, or have a perceived exposure to climate vulnerability, based on recent experiences.

Action plans are developed for each asset and include the implementation of operational responses, maintenance regimes and emergency response plans with a view to improving the resilience score of the asset.

We undertake similar assessment processes in our residential and our retirement living portfolios. We are developing a simple asset decision-tree, to help project teams understand the level of assessment required for their project. We undertake comprehensive assessments where projects are found to be exposed to higher levels of climate impact. For projects considered to be lower risk, we focus on compliance with regulatory standards and respond accordingly to specific issues. The assessment methodology has been developed to help us to respond to the climate resilience credits within the Green Star Communities and design and as-built rating tools.

Our project teams consider climate resilience in the design of our shopping centres and residential communities by including principles-based criteria in our design guidelines and minimum standards. We look at future climate scenarios to understand how the designs of our assets in development will respond to increased rain, cyclone and heat events, and what we need to consider when designing stormwater, roofing and air conditioning systems. Considering these attributes early in design will ensure we avoid building obsolescence and vulnerability into our new developments.

We develop Cyclone and Emergency Management Plans for all our assets and update them as required with lessons learned from recent extreme weather experiences. In addition to using a traditional risk matrix for climate vulnerability, we are also developing an 'Opportunities Matrix' to identify the value of discretionary climate resilience initiatives such as shade sails in our carparks. These initiatives are generally not highly prioritised using a traditional risk-based likelihood and consequence assessment. However, by viewing them as opportunities, they are prioritised based on the ability to reduce the asset's vulnerability.

We are aware that our approach within climate resilience can support us to achieve greater points through the usage of the Green Building Council of Australia's (GBCA) Green Star rating. All new commercial property and retirement living developments are required to achieve a minimum 4 Star Green Star rating. Our Caloundra South residential master-planned community achieved a 6 star rating under the Green Star Communities tool in FY15. As a part of our commitment under Green Star Communities, we have prepared climate adaptation and resilience plans, which will inform project teams on how to create resilient communities throughout the life of the development. Given we have only undertaken a single assessment using the communities rating tool to date, we do not yet have a target for our communities projects, however we will pilot further projects during FY16 to help us better understand our future position on the tool.

Assets also consider and plan for climate resilience initiatives through our sustainability and asset /business planning processes, undertaken annually.

We continue to review climate scenarios in new regions, taking into consideration the new data contained in the IPCC AR5. With this information, we will undertake new assessments in a systematic way across our portfolios, ensuring we maintain diversity in the selection of assets in different climatic regions.

### Roles and Responsibilities

Our climate resilience approach, targets and performance tracking are overseen by our Board Sustainability Committee. Accountability for climate-resilience delivery sits with various Executive Committee members, including the CEOs of Commercial Property, Residential and Retirement Living. An Employee Sustainability Committee also provides guidance on climate resilience and initiatives. Stockland's Chief Operating Officer assumes ultimate responsibility at a Group level for climate resilience performance and reports directly to the Managing Director.

The National Sustainability Manager, reporting to the Chief Operating Officer, has responsibility for ensuring the effective implementation and evaluation of Stockland's climate resilience approach and is supported by a team of sustainability specialists. This team guides the residential, retirement living and commercial property asset teams in effective delivery of the Sustainability Policy and supporting toolkits. Our Development and Asset Managers are responsible for ensuring that a climate-resilient approach is effectively delivered and managed at the project and asset level.

## 4. Review and Evaluation

Across Commercial Property, we review climate adaptation action plans to track progress on the implementation of initiatives following initial assessment. Reassessment of the assets will be conducted in FY17 to measure the improvements in resilience against the actions that were recommended at the time of the original assessment. For comparison purposes, it's important to ensure the assessment and reassessment scores are transparent and consistent. This has proved an effective way of measuring improvements, and has enabled us to set targets for our most vulnerable assets.

Using the 1-to-9 rating scale developed as part of our assessment methodology (where 1 is extremely resilient and 9 is extremely vulnerable), we have identified the average score for our portfolio and for specific regions. For our most vulnerable assets in North Queensland (prone to extreme weather events), we have set a regional improvement target to be achieved by FY17. We aim to improve the regional average resilience score for our North Queensland shopping centres from 5.9 to 5.5 through the implementation of recommended actions and reassessment of the centres in this region.

Climate resilience as a concept is gaining more attention across all industry sectors and is complementary to our other risk assessment processes. We are making steady progress to embed climate resilience awareness and practice into our operational risk framework. We are focused on ensuring climate resilience is fully integrated into our standard risk management processes which will provide greater visibility over the implementation of action plans. To date, we have integrated climate resilience into a number of risk assessment frameworks, and have presented this to our insurers with positive feedback and recognition of our efforts to build a more resilient portfolio of assets.

### 5. FY15 Update

#### Commercial Property

Keeping to our approach of testing future climate scenarios in a broad variety of geographic locations, it is important to understand the regional variances and unique vulnerabilities for each of our assets in regions where our portfolio is widespread. In FY15, climate resilience assessments were undertaken at Stockland shopping centres at Traralgon in Victoria and at Forster and Bathurst in NSW. We have also engaged the centres that have been assessed over the last three years to review progress on the range of climate resilience actions that have been implemented across the portfolio.

#### Case Study: Stockland Rockhampton Moore's Creek footing repairs

The City of Rockhampton has experienced significant rain events over the past 4 years, resulting in major regional and local flooding. Our shopping centre at Rockhampton has proven resilient to local flooding due to its position above the flood level, however, it has been vulnerable to damage from flooding along Moore's Creek which flows under one section of the centre.

In major rain events in January 2011 and January 2013, footings to the structural foundations of the centre constructed into the creek bed, designed to withstand a 1:100 year flood event, were exposed after shotcrete reinforcing and stone ballast washed away. Repairs had been undertaken on two occasions in three years to the same standard as originally designed. After the second flood washed away the repaired footings, a more resilient design was implemented to withstand a 1:300 year flood event.

In March 2015, Cyclone Marcia swept through Rockhampton and brought another major rain event. Flooding along Moore's Creek again threatened to damage the footings to the centre. The more resilient design of the footing repairs on this occasion held well with no major damage.



*Moore's Creek flowing under a section of our Rockhampton shopping centre showing reinforcing to the structural footings.*

#### Retirement Living

We have conducted assessments of three existing retirement living villages, and a village currently in the design phase, to identify climate risk levels and adaptation measures required. The findings helped us to better understand where we could make changes to our design and operations to ensure more resilient villages. In particular, we identified elements such as darker roof colours, which require more energy to cool in summer, and the importance of stormwater maintenance to flood liable areas.

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### Residential

A climate adaptation decision-tree, to help project teams plan for climate resilience, was prepared for our residential business and will be rolled out in FY16. The decision-tree will help project teams to quickly self-determine whether there are potential climate-related issues associated with their project site (such as bushfire, flooding and sea level rise) and the opportunities to build resilience into their master-planned projects.

Our first 6 star Green Star Communities project, Caloundra South, committed to a range of initiatives to improve the resilience of the project, including maximising green space and shade across the development and identifying reflective roof materials and colours for inclusion in design guidelines.

## 6. Targets and Progress

### FY15 Priorities

#### Commercial Property

Improve the regional average resilience score for North Queensland shopping centres from 5.9 to 5.5 (as measured by the climate resilience and vulnerability assessment) by FY17.

In Progress

### FY15 Performance

Climate resilience initiatives are being implemented from action plans on sites that have been assessed. The target score will be recalculated and reported in FY17.

#### Retirement Living

All villages to complete a climate resilience assessment by end of FY17.

In Progress

Assessment methodologies and decision-trees completed. Assessments to be rolled out over FY16 and FY17.

While all villages will run through the decision tree assessment, the target for FY16-17 has been restated to focus on development villages in high risk locations.

#### Residential

All residential projects to complete a climate resilience assessment by the end of FY17.

In Progress

Assessment methodologies and decision-trees completed.

No active high risk projects were identified in FY15. Assessments to be rolled out over FY16 and FY17.

While all projects will run through the decision tree assessment, the target for FY16-17 has been restated to focus on residential projects in high risk locations.

### FY16 Priorities

#### Commercial Property

- Undertake climate resilience assessments in three new locations and implement initiatives from action plans on all sites assessed.
- Improve the regional average resilience score for North Queensland shopping centres from 5.9 to 5.5 by FY17.

#### Retirement Living

- All retirement living villages in development to complete a climate resilience and vulnerability assessment.
- All development villages in potential high-risk locations (climate risk) to complete a climate resilience assessment by end of FY17.
- Undertake climate resilience and vulnerability assessments at Cardinal Freeman and Willowdale retirement living villages.
- Embed the climate resilience and vulnerability criteria into the operational risk procedures.

#### Residential

- All active residential projects in high risk locations (climate risk) to complete a climate resilience assessment by the end of FY17.

## 7. Appendix A

Complete list of documents in the DMA series:

Enrich Our Value Chain	1. Governance and risk
	2. Stakeholder engagement
	3. Supply chain management
	4. Employee engagement
	5. Human capital development
	6. Diversity and inclusion
	7. Health and safety
	8. Human rights
Optimise and Innovate	9. Energy and emissions
	<b>10. Climate resilience</b>
	11. Biodiversity
	12. Water management and quality
	13. Waste
	14. Materials
	15. Asset ratings and certification
Shape Thriving Communities	16. Community investment
	17. Community development
	18. Customer engagement
	19. Customer safety and security