Module: Introduction

Page: Introduction

CC0.1

Introduction
Please give a general description and introduction to your organization.

Stockland has a long and proud history of creating places that meet the needs of our customers and communities. Stockland was founded in 1952 with the vision to "not merely achieve growth and profits but to make a worthwhile contribution to the development of our cities and great country."

Pursuing that vision has seen us grow to become one of Australia's leading diversified property groups - developing, owning and managing a large portfolio of shopping centres, industrial and office assets, residential communities and retirement living villages.

We operate across most parts of the property value chain. However, we engage others to carry out building works, to deliver services such as security and cleaning, and to provide audit and consultancy services.

This survey discloses information regarding our climate change management approach and greenhouse gas emissions performance for the 2014 financial year, ending 30 June 2014.

We publish independently assured data, commitments and commentary as part of our Annual Review, Sustainability Reporting and our requirements under the Australian Government's National Greenhouse and Energy Reporting Act.

Our Annual Review can be found at http://stocklandcorporatereporting2014.com.au/ and our Sustainability Reporting and previous Carbon Disclosure Project submissions can be found at http://www.stockland.com.au/about/sustainability.htm

Stockland’s portfolio is spread over three business units – Commercial Property, Residential and Retirement Living. An overview of the portfolio, as at 30 June 2014, is provided below. Our property portfolio can also be found in detail online at http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MjQ4MTg2fENoaWxkSUQ9LTF8VHlwZT0z&t=1

COMMERCIAL PROPERTY - Stockland’s Commercial Property business accounts for approximately 70% of our asset mix and comprises three asset types:

- Retail - We are one of the largest retail property owners, developers and managers in Australia. Our 40 retail centres accommodate more than 3,200 tenants, realising over $6 billion of retail sales per annum.
- Logistics and Business Parks - our logistics and business parks portfolio comprises 21 properties with just over 1.2 million square metres of building area.
- Office - Our office portfolio comprises 10 assets in key locations including three joint ventures.

RESIDENTIAL – We are a leading residential developer in Australia, focused on delivering a range of masterplanned communities and medium density housing in growth areas across the country with over 81,500 lots in our portfolio, with a total end value of approximately $20.4 billion.

RETIREMENT LIVING - We are a top three retirement living operator within Australia, with a deep development pipeline and over 8,200 established units across five States and the Australian Capital Territory.

Stockland has identified changes in the climate as a key challenge as well as an opportunity for the organisation. Along with risks and opportunities associated with mitigating carbon emissions and enhancing the energy efficiency of our portfolio, we are taking active steps to increase the resilience of our assets and reduce their potential vulnerability by proactively adapting to a changing climate.

Our Commercial Property business is the largest contributor to greenhouse gas emissions in the Group and presents the greatest opportunity for emissions reduction. As it is our most established asset class, and the one over which we have the greatest degree of control, we have also used it to pilot our work in climate vulnerability and resilience. As such, the majority of our initiatives and achievements to date have related to the Commercial Property business. Over the past few years we have been transferring these learnings to our other business units.

In the years ahead we will continue to explore and identify opportunities for energy efficiency, climate change mitigation and improved climate resilience and adaptation across all three of our business units.

CC0.2

Reporting Year
Please state the start and end date of the year for which you are reporting data.
The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.
We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.
Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Mon 01 Jul 2013 - Mon 30 Jun 2014

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country
Australia

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

AUD ($)

CC0.6

Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.
If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx.

Further Information

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

SUSTAINABILITY BOARD COMMITTEE
The purpose of the Committee is to ensure that the Group operates its business ethically, responsibly and sustainably and to consider the social, environmental and ethical impact of our business activities; major corporate responsibility and sustainability initiatives and changes in policy; and stakeholder communications about Stockland's sustainability policies and performance.

From 1 July 2012, all Directors of the Board were members of the Sustainability Committee, reflecting the integral role that sustainability plays in Stockland's business operations and brand value. This enables all Directors to be well informed about and engaged in policies and decisions relating to our economic, social, and environmental performance. The Sustainability Committee met three times in FY14.

A sustainability update is submitted to the Executive Committee (ExCo) and to the Board each month, which:
- provides updates relating to our climate change and energy efficiency strategies and initiatives
- tracks monthly progress against our carbon reduction targets
- provides background information to support approval requests for significant strategic changes and/or the implementation of new programs and initiatives relating to energy and climate change.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

Yes

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Corporate executive team	Monetary reward	Emissions reduction target	The Executive team have performance indicators linked to our greenhouse gas emission targets.
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	The CEO (along with other members of the executive team) has a performance indicator linked to greenhouse gas emission targets.
Facility managers	Monetary reward	Emissions reduction project Emissions reduction target	Facility Managers have incentivised performance indicators linked to the greenhouse gas emissions targets for assets and greenhouse gas emissions project level reporting.
Environment/Sustainability managers	Monetary reward	Emissions reduction project Emissions reduction target	Environment/Sustainability Managers have incentivised performance indicators linked to greenhouse gas emission targets and climate change mitigation and adaptation actions.
All employees	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction	All employees have incentivised performance indicators linked to sustainability performance as part of our balanced scorecard performance assessment approach. These differ in accordance with the roles and responsibilities of the individual employee (e.g. consideration of climate change risks/opportunities, achievement of emissions reduction targets, promotion of energy efficiency initiatives with suppliers/customers etc).

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
		project Energy reduction target Efficiency project Efficiency target Behaviour change related indicator	

Further Information

For further information please refer to the Governance section of our FY14 Sustainability Reporting online at http://stocklandcorporatereporting2014.com.au/sustainability--area/governance. For further information, please refer to the Remuneration section of our FY14 Annual Review (balanced scorecard) online http://stocklandcorporatereporting2014.com.au/governance--area/remuneration

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	Stockland's assets and developments across the entire portfolio (New South Wales, ACT, Victoria, South Australia, Western Australia and Queensland)	> 6 years	All functions (Business Units & Group, including the Executive Committee) are responsible for the identification, assessment and management of risks. This includes developing, implementing and following appropriate processes, procedures and checklists and monitoring these controls to ensure they are effective. Each Business Unit has developed Sustainability policies which outline performance standards and requirements relating to energy efficiency and climate change adaptation to be considered in the design, construction and operation of projects and assets. The Sustainability team provide the Executive team and the Board with monthly updates on progress towards emission reduction targets, adaptation and resilience initiatives and any identified climate change related risks and opportunities identified at the asset and/or Group level.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

COMPANY LEVEL
Formal risk workshops are carried out on an annual basis with leaders from across the business. The workshops are used to identify significant sources of uncertainty, including emerging risks and opportunities. Identified risks are analysed and evaluated at a company level and consolidated into a risk profile for each Business Unit. A Group risk profile is also produced including items that have a company-wide impact, such as climate change. Associated risk plans are monitored and reported quarterly.

ASSET LEVEL
Stockland has a diversified property portfolio that is actively managed in terms of portfolio composition and performance. The portfolio for each asset class is assessed twice a year, including an assessment of financial and non-financial risks and opportunities. We also conduct climate vulnerability and resilience assessments across our assets. These assessments focus on the vulnerability of the asset to climate and its ability to endure severe weather impacts and operate without disruption. Resilience Action plans are then developed for assets and include operational responses, maintenance regimes and business continuity plans. Our Group-wide focus on energy efficiency manifests differently across our three business units, with implementation posing different challenges and opportunities for each asset class. We concentrate our energy and emissions reduction efforts on our Commercial Property and Retirement Living businesses where we directly control the built form. In Residential, we have limited control over the performance of housing within our masterplan communities as we predominantly sell land to our customers. However, we actively promote energy efficient design and opportunities through our Greenstar communities rating tool and CCAP Precincts in the

design of our masterplans.

Risks and opportunities are reviewed at each stage of the project lifecycle as part of our investment process and project management process.

CC2.1c

How do you prioritize the risks and opportunities identified?

At the asset level, risks and opportunities are prioritised based on:
- Their overall potential impact on asset performance
- The financial impact to the business in managing/mitigating
- The impact on communities and the environment in which we operate.

Across the portfolio, risks and opportunities are prioritised based on the:
- geographical areas of highest risk
- design attributes of the asset which affect climate resilience
- regional predictions for weather changes over two time horizons (2030/2070)
- overall impacts on company emissions
- impact on the local communities and environment
- overall risk to portfolio value and revenue.

The process differs across our Business Units based on systems in place to measure and evaluate energy and climate change data and performance. For our Commercial and Retirement Living businesses for example, minimum standards have been developed to ensure energy efficiency is designed into all new build projects and major refurbishments. The Green Star accreditation process (which Stockland has formalised into Green Plans for development and construction) requires assessment and prioritisation of climate change risks and opportunities. This includes energy modelling to assess highest abatement at lowest cost. Targets are set and performance is monitored to measure the design outcomes and efficiency gains made from building tuning and systems optimisation.

For our Residential and Retirement Living businesses, we generally use a statistical model that compares our base project masterplans against regional benchmarks. The tool is used to establish performance based targets at the planning and design phase to reduce energy and greenhouse gas emissions and inform project transport needs. We then model different design and technology options that can be introduced to improve project performance and produce a marginal cost curve to enable a simple assessment of cost and payback of each opportunity or design element.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

i. How strategy is influenced:

'Community' is at the heart of Stockland's business, with our investment in communities underpinning our customer proposition and enhancing our licence to operate. We have three focus areas to ensure we deliver value for our investors and other stakeholders. These are "grow asset returns and customer base", "operational excellence", and "capital strength". Climate change is an integral component of each of these focus areas and we strive to create climate resilient assets and communities with adequate social and built infrastructure.

Stockland conducts an annual strategic review of its Group and Business Unit strategies and our Strategic Risk team provides advice to management and the Board Risk Committee on strategic risks. This review takes into account risks and opportunities for the business, including financial, social and environmental risks and opportunities. Climate change risks and opportunities and their potential impact on corporate strategy are considered within the review process.

Our Group Executive of Strategy and Stakeholder Relations is responsible for ensuring that the annual Board Strategy Review (BSR) addresses the key risks and opportunities for the business and that we track correctly against our risk adjusted framework.

ii. What CC aspects have influenced strategy:
Our recent Board Strategy Review sought to define a strategy that would optimise returns within an acceptable level of risk, and deliver innovative products to meet customer needs and expectations. Risks relating to a changing climate, and the opportunity to create assets and developments which address both the social and environmental implications of these changes were considered within that context.

The key climate change risks and opportunities areas identified through our strategic review process were:
- Physical risks: ensuring our assets are resilient to the pressures of changing climate and extreme weather conditions.
- Supply chain risks: ensuring climate change risks and opportunities are considered and factored into the activities of our key suppliers.
- Financial risks: increased costs associated with changing regulation, more frequent asset repair/maintenance etc.
- Cost reductions: focus on operational efficiency (linked to emission reduction targets), as well as the upfront design and build of efficient and resilient assets.
- Energy abatement and alternate energy: capitalising on voluntary emissions trading opportunities through abatement opportunities and also on alternative energy sources to transition from operational cost to revenue generation (e.g. solar installations).

iii. Short-term strategy influence:
The short term (ie 1-3 years) strategy components influenced by climate change include:
- Operational efficiency - the approval and adoption of energy efficiency targets across all business units and assets, and potential increased spend on environmental major works.
- Customer satisfaction/ Climate resilience - enhancing affordability through improved energy efficiency in the design and operation of assets and guarantee business continuity for our tenants through the provision of resilient assets. This may also reduce Stockland's maintenance and upgrade costs.
- Sustainable development - make our communities and assets stronger, healthier, more connected and more resilient through environmental and social initiatives, including Green Star ratings and the approval of alternate energy installations across our assets.

iv. Long term strategy influence
The long term (ie. 6-10 years) strategy components influenced by climate change include:
- Monitoring and adapting our portfolio to meet changing social and environmental realities through adapting our existing assets, strategic acquisition, divestment and development of resilient assets.
- Adoption of new business types, models and geographies that are more resilient to climate change and associated risks.
- Delivering a better product for our customers which meets their needs now and for the future.
- Ensuring we are minimising our liability – we limit our exposure to legal risk through the delivery of physical product that is in alignment with building code standards or better.

v. Strategic advantage gained
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 and as well as our ability to deliver greater returns in the medium to long-term.

vi. Decisions in reporting period affected by climate change:
- Stockland made a significant decision in FY14 to reduce our Commercial Property portfolio emissions intensity by a further 10% (on FY14 baseline) by FY17. This commitment was made following a 5 year assessment of our Commercial Property portfolio in FY13 to identify opportunities to upgrade our assets and improve the climate resilience of our portfolio.

- Stockland conducted an assessment of climate change risks at our Rockhampton shopping centre and implemented a plan to improve the cyclone resilience of this centre, at an approximate cost of $700,000.

- Stockland committed to a 40% reduction in energy used by new residential communities compared to regional averages. Our CCAP Precinct tool has been used to assess and prioritise the energy initiatives that deliver the greatest emission reduction outcomes for the lowest cost in our residential communities.

CC2.2b

Please explain why climate change is not integrated into your business strategy

CC2.2c

Does your company use an internal price of carbon?

Yes

CC2.2d

Please provide details and examples of how your company uses an internal price of carbon

In the absence of a national carbon trading scheme, Stockland assesses potential carbon pricing internally in a number of ways.
- For assets, we receive a five year energy forecast that includes a price probability for legislation introducing a carbon price.
- In 2011, we assessed the impact of a price on carbon across our operations and through our supply chain. This allows us to understand direct and indirect cost impacts.
- Our New South Wales business also assesses the energy certificate trading opportunities arising from improvements in our NABERS ratings.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers
Trade associations
Funding research organizations

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Adaptation resiliency	Support	Stockland, in collaboration with the Australian Built Environment Council, has discussed opportunities to increase the resilience of the built environment with the National Climate Change Adaptation Research Facility and the Federal Government.	In collaboration with industry and the Australian Sustainable Built Environment Council, a proposal has been put forward to the Federal Government for an Adaptation Policy Framework to improve the resilience of the built environment in the face of climate change. This Framework aims to: - protect the wellbeing of communities through targeted policy initiatives and better urban and building design - ensure appropriate institutional arrangements to facilitate adaptation - realise economic benefits from early adaptation through effective strategic planning and risk minimisation - advance sustainability through better resource and risk management strategies - increase community education and awareness about climate change risks and adaptation.
Energy efficiency	Support	As a member of the National Sustainability Committee at the Property Council of Australia, Stockland is involved in the preparation of a 2015 advocacy paper to explain the role of the property sector in managing carbon emissions and advocating for a better sustainability outcome. The aim is to describe the principles necessary for energy efficiency and renewables to flourish.	The PCA National Sustainability Roundtable proposes to develop a comprehensive framework that recognises the following areas that will assist the industry in becoming more sustainable: ● The respective roles of sustainable carbon reduction strategies: ○ energy efficiency ○ on site renewables energy generation and storage ○ off site renewable energy ○ fuel switching and ○ carbon offsets ○ electrification of the transport sector ● Incentives that encourage best practice, developing new skills and technologies ● Removal of perverse subsidies where they continue to exist ● Programs that account for the cost of carbon ● Programs that reward and create demand for high performing buildings and cities ● The role of new skills and training ● The role of new and emerging technologies ● That markets can be designed that drive desired behaviours ● That collaboration between energy generators, energy distributors and energy users is required for optimal energy productivity.
Other: Green Buildings		Green Building Council - Stockland has both a Board member and a member of the Green Building Council Steering Committee (industry governance committee to guide strategy). Climate change and appropriate frameworks to enhance this across all asset classes are key drivers.	The GBCA engages with government to promote the role of Green Buildings in reducing Australia's emissions. GBCA proposed incentives for developers to take up more sustainable and efficient developments and operations that encourage best practice sustainable development and enhance the development of new skills and technologies for the industry.
Energy efficiency		Stockland engages with the Office of Environment and Heritage - NABERS Technical Advisory Group - as a member of the industry advisory group.	Enhanced standards such as Retail Commitment Agreements

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
Property Council of Australia	Consistent	"The property sector is intrinsically linked to efforts to adapt to the impacts of climate change. It is the places created by our built environment, and the people they house that much of our adaptation effort will be focused on". The Property Council also focuses "on eco-efficient - less in, more out - assets and effective strategic planning of our cities"	We support the Property Council's position on climate change, their focus on eco-efficiency and the need to establish an Adaptation Policy Framework. We provide case studies to provide support for their submissions. Our Managing Director and CEO is the President of the Property Council of Australia and we are on the National Sustainability Roundtable which promotes innovative climate change action and make recommendations on effective government climate change policy for the property sector.
Green Building Council of Australia	Consistent	The Green Building Council of Australia (GBCA) is supportive of raising awareness and taking action on climate change adaptation.	We support the GBCA's position on climate change and work in partnership with the GBCA to develop tools and initiatives to promote more efficient and resilient assets and communities across Australia. We sit on the Board and on the technical and advocacy committees at the GBCA to promote innovation, best practice and advocate for a more sustainable built environment through the development and use of voluntary rating tools to meet policy objectives and access government incentives.

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

Yes

CC2.3e

Do you fund any research organizations to produce or disseminate public work on climate change?

Yes

CC2.3f

Please describe the work and how it aligns with your own strategy on climate change

Green Cross Australia has launched the Business Adaptation Network as a place where best adaptation practice can be shared to mainstream responses and improve Australia's resilience to the impacts of climate change. We contribute to the Business Adaptation Network through our annual membership fee.

To kick-start development of the Business Adaptation Network, Green Cross Australia used an entrepreneurial shared interest model by reaching out to Governments and business adaptation leaders to offer a financial and expert contribution towards network development, supported by the adaptation research community.

With a portfolio of assets and operations in major regional areas around the country, we are increasingly focussed on the vulnerability and resilience of buildings in a changing future climate. Our involvement in the Business Adaptation network allows us to stay in touch with the latest thinking around adaptation and to share our experiences with like-minded organisations.

We also participated in a cyclone hypothetical exercise run by Green Cross Australia. To prepare for Townsville's next major cyclone, Green Cross Australia worked with Townsville City Council to produce a hypothetical scenario planning exercise based on Cyclone Yasi in 2011 hitting Townsville directly. Stockland participated in this exercise, which explored the relationships between civic leadership, business and community self-reliance and how media and social media pressures influence preparedness, response and recovery. Further information can be found at http://www.greencrossaustralia.org/our-work/disaster-and-community-resilience/townsville-cyclone-hypothetical.aspx

CC2.3g

Please provide details of the other engagement activities that you undertake

CC2.3h

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Stockland's climate change strategy is supported by a Group Climate Change Position Statement, our Environment Policy and Business Unit sustainability policies.

Stockland's Stakeholder Relations team leads and supports engagement with Government and Industry to ensure that good practice is followed and that our direct and indirect activities are consistent with our policies and strategy.

We sit on the Board and on the technical and advocacy committees at the Green Building Council of Australia to promote innovation and best practice, and to advocate for a more sustainable built environment through the development and use of voluntary rating tools to meet policy objectives and access government incentives.

Our Managing Director is the President of the Property Council of Australia and we site on the National Sustainability Roundtable to both promote innovative climate change action and make recommendations relating to effective government climate change policy for the property sector.

Our engagement is governed by a Board-endorsed government and stakeholder engagement policy that applies to all our people and covers donations, the role of consultants, access to our properties, gifts and personal political participation. The policy is updated annually and is part of our Code of Conduct; signed by employees on commencement of employment at Stockland and reviewed and signed by existing employees as part of our annual Compliance Statement.

CC2.3i

Please explain why you do not engage with policy makers

CC2.4

Would your organization's board of directors support an international agreement between governments on climate change, which seeks to limit global temperature rise to under two degree Celsius from pre-industrial levels in line with IPCC scenarios such as RCP2.6?

No opinion

CC2.4a

Please describe your board's position on what an effective agreement would mean for your organization and activities that you are undertaking to help deliver this agreement at the 2015 United Nations Climate Change Conference in Paris (COP 21)

An effective agreement would support organisations like Stockland in delivering climate resilient solutions for both our customers and communities.

Further Information

Stockland Memberships can be found at this link: http://stocklandcorporatereporting2014.com.au/awards--area/individual-awards

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?

Absolute and intensity targets

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
Abs1	Scope 1+2	27%	70%	2006	24679	2030	As part of the Better Buildings Partnership with City of Sydney, we are committed to reducing the emissions of our Sydney CBD office assets by 70% by 2030 using a 2006 base year. Emissions across our Sydney CBD office assets totalled 24,679 tonnes CO2e in 2006. This equates to an absolute reduction of 17,275 tCO2e by 2030.

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
Abs2	Scope 1+2	100%	51%	2009	64246	2014	In FY09 we set a 4.5 star average NABERS rating target for our office portfolio. We fell short of this target, achieving 4.47 star NABERS energy average in FY14, which is still a substantial improvement on our FY09 average of 3.4 stars. While we track these absolute emissions reductions annually, we continue to frame our target in terms of improvement to NABERS (rather than % emissions reduction) as it is easier to normalise across our diverse office assets. We will continue to aspire towards 4.5 star NABERS average, however we acknowledge this may be challenging given the sale of certain high performance buildings in our portfolio over the last few years. The % reduction target provided here is based on a 0.9 improvement in rating performance to date, equating to a 51% reduction.

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment
Int1	Scope 1+2	100%	20%	Other: kgCO2-e per square meter	2009	87	2014	In Commercial Property, we have successfully met and exceeded our portfolio's emissions intensity of 20 per cent by FY14, based on FY09 figures. We achieved 29% improvement in FY14 and have committed another 10% against FY14 by FY17.
Int2	Scope 1+2	100%	10%	Other: kgCO2-e per square meter	2014	61.52	2017	As outlined above, we have committed to another 10% reduction on FY14 by FY17.

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	20	Decrease	20	On a like-for-like basis this would represent a 20% absolute reduction. The Scope 3 decrease represents the reduction in transmission losses as a result of the absolute reduction in electricity use.
Int2	Decrease	10	Decrease	10	On a like-for-like basis this would represent a 10% absolute reduction.

CC3.1d

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
Abs1	33.33%	75%	We are on track to achieve this target well ahead of schedule with a reduction of 52.5% in FY14.
Abs2	100%	98%	We fell short of this target, achieving 4.47 star NABERS energy average in FY14 which is still substantial improvement on our FY09 average of 3.4 stars.
Int1	100%	100%	In Commercial Property, we have successfully met and exceeded our portfolio's emissions intensity of 20 per cent by FY14 based on FY09 figures. We achieved 29% improvement in FY14 and have committed another 10% against FY14 by FY17.
Int2	0%	0%	This is a new target, established according to a FY14 baseline. Performance will be reported in future reporting years.

CC3.1e

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

CC3.2

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

CC3.2a

Please provide details of how the use of your goods and/or services directly enable GHG emissions to be avoided by a third party

We sell communities, retirement living homes and commercial property assets that can all help reduce emissions through increased energy efficiency. By building efficient products and centres we are able to reduce the overall energy bills and emissions for our tenants and customers.

We achieve this through: Improving NABERS ratings; Green Star ratings across our portfolio of assets with a focus on emissions improvements; solar incentives; submetering; LED lighting; passive design in master plan communities; energy efficient HVAC in Commercial and Retirement Living (RL); increasing operational efficiencies through building management; requiring all our RL homes to achieve 5% better thermal comfort performance than regulation as rated by NatHERS (National Home Energy Rating Scheme).

Case Study: Avoiding emissions at Selandra Rise Retirement Village

i) How Scope 1 and/or 2 emissions were avoided

Emissions were avoided at our Selandra Rise Retirement Village by developing a 4 Star Green Star rated retirement village using the “Retirement Living custom tool” which represents ‘Australian Excellence’ in environmentally sustainable design. Selandra Rise Retirement Village is the first retirement living village to achieve a Green Star retirement village rating in Australia.

Initiatives contributing to avoidance of third party emissions included efficient lighting, shut-down switches, natural gas installations, natural light and cross ventilation, above regulation thermal performance of all homes (ie average > 7 star), efficient HVAC systems, performance glazing, education, highly efficient appliances, provision of clothes lines.

ii) An estimate of the amount of the emissions that were avoided over the time

Residents living in our 7 star energy rated villas and apartments at Selandra Rise will generate approximately 608 tCO2-e, compared to benchmark residential figures of 1,323 tCO2-e, which equates to approximately 715 tCO2-e (or 54%) of avoided emissions per year. This also means our residents save an average of over $700 a year on daily living expenses.

iii) Methodology, assumptions, emission factors and GWS used for the estimations

Electricity (Scope 2)
NSW & ACT = 0.87kgCO2e
VIC = 1.17kgCO2e
QLD = 0.82kgCO2e
WA = 0.78kgCO2e
NT = 0.69kgCO2e
SA = 0.62kgCO2e
TAS = 0.2kgCO2e

GAS (Scope 1)
Nationally = 0.05133kgCO2e

The GWP of CO2 is 1.

The methodology for these calculations is based on the application of the Green Star Modelling Tool, which determines a standard benchmark for residential buildings and awards points for performance beyond that standard. The final Green Star rating for the design and build of residential buildings enables direct comparison of building performance to the benchmark standard.

Under the Green Star tool the Selandra Rise Retirement Village residences achieved 21 out of the 25 points available in the Green Star 'Energy' category, with 17 points awarded for greenhouse gas emissions reduction strategies, and the maximum of two points awarded for peak energy demand reduction.

iv) Whether considering originating CERs or ERUs within the CDM or JI (UNFCC) (or other credit scheme?)

There currently isn't a program that will recognise energy savings for this project.

Note that while Selandra Rise is the first "whole of village" rating for retirement living, Affinity Village in Western Australia (featured in our FY12 CDP Response) was the first retirement living development to have any type of Green Star rating with its clubhouse rated under the community buildings pilot tool in FY13, equally resulting in avoided emissions and reduced costs for our residents.

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	93	
To be implemented*	32	990
Implementation commenced*	1	163
Implemented*	33	2593
Not to be implemented	51	

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	Lighting upgrade	920	Scope 2	Voluntary	186000	471000	1-3 years	3-5 years	Lighting upgrades using LED lighting technology were completed or underway across 5 Retail centres in FY14 with the actual savings consistently meeting expectations. Additional lighting upgrade opportunities are being investigated for FY15. This was a voluntary initiative implemented to reduce Scope 2 emissions across our retail portfolio and was a contributing factor towards commercial property achieving its FY14 reduction targets.
Energy efficiency: Building services	Smart energy monitoring systems	996	Scope 2	Voluntary	206000	1040000	4-10 years	6-10 years	A smart energy monitoring and metering system was installed across the retail portfolio in FY14. Next generation metering technology (Fault detection via BMS) was successfully trialled at two retail assets. Portfolio roll-out of this technology is now underway.
Energy efficiency: Building services	Solar	677	Scope 2	Voluntary	14000	86000	4-10 years	16-20 years	Delivered one alternative energy project within our retail portfolio with the installation of solar at Stockland Nowra. This was a voluntary initiative implemented to reduce Scope 2 emissions across our retail portfolio and was a contributing factor towards commercial property achieving its FY14 reduction targets.
Energy	BMS re-	105	Scope	Voluntary	20000	64230	4-10	16-20	Consultants were engaged to review

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
efficiency: Building services	commissioning and tuning		1 Scope 2				years	years	and fine tune the Building management system's (BMS) controls / logic at Stockland Jesmond. This was a voluntary initiative implemented to reduce Scope 1 & 2 emissions.

CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Marginal abatement cost curve	At an organisational level, we use carbon abatement cost curves to identify specific abatement opportunities and the costs to implement these measures. The curves enable us to quickly model the costs of reducing emissions across our entire asset portfolio, as well as at the individual asset level. The estimates are based on Stockland carbon abatement data, ensuring a high level of confidence in the results returned. Marginal abatement cost curve is also used within our development masterplanning process to identify key infrastructure and programs to reduce emissions.
Compliance with regulatory requirements/standards	Compliance with State and Federal regulation on energy efficiency is contributing to investment in more efficient design and better management of our projects. We aim to stretch beyond these increasing compliance requirements.
Other	Development standards/ratings - Green Star as a minimum development standard. Embedding minimum standards for energy efficiency is driving investment in emission reduction activities across our organisation. Our Commercial Property business has minimum Green Star rating performance standards and in FY14 our Retirement Living and Residential businesses also piloted and implemented Green Star standards for design and build of public buildings and communities respectively. There are minimum energy efficiency requirements for all Residential and Retirement Living projects, including maximising the solar orientation of sites, providing energy efficient lighting in public spaces and connecting dwellings to

Method	Comment
	reticulated natural gas or LPG where available. Our Retirement Living business committed to delivering all new villages with a 5 per cent improvement on building code energy efficiency performance requirements.
Other	Operational standards/ratings - using the NABERS Energy rating tool to benchmark our building performance, we are improving energy efficiency through capital investment in high-efficiency chillers, building management systems, lighting controls and variable speed drives.
Dedicated budget for energy efficiency	CAPEX budget - if an energy efficiency project meets our investment hurdle rate and can deliver a return on investment, then it is given approval to proceed to implementation. This can be achieved at an individual site level or at a portfolio level.
Dedicated budget for low carbon product R&D	New technology is trialled and if successful, then it's rolled out across the portfolio e.g. LED lighting.
Dedicated budget for other emissions reduction activities	Budget is set aside for building tuning and maintenance activities that result in improved emission performance.
Employee engagement	Promoting staff sustainability awareness, seek innovative ideas from staff and drive energy efficiency across corporate and site offices.
Internal incentives/recognition programs	KPIs for emissions reduction targets for key development and operations staff. Acknowledging best practice and rewarding through internal promotion and recognition (e.g. intranet stories and values awards).

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

Page: CC4. Communication

CC4.1

Have you published information about your organization’s response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Status	Page/Section reference	Attach the document
In voluntary communications	Complete	Annual Review, Results, Delivering our Strategy (Operational Excellence), Sustainability	https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/CC4.1/Stockland Annual Review Website.pdf
In voluntary communications	Complete	Sustainability Report 2014 (Energy and Climate Change Section) http://www.stockland.com.au/about/sustainability.htm	https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/CC4.1/5.-energy-and-emissions_dma.pdf

Further Information

Stockland's 2014 Sustainability Report can be found at http://www.stockland.com.au/about/sustainability.htm. Stockland's Annual Review can be found at http://www.stockland.com.au/corporatereporting2014 Stockland's Energy and Emissions and Climate Resilience Disclosures on Management Approach are attached.

Attachments

https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC4.Communication/5.-energy-and-emissions_dma.pdf
https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC4.Communication/6.-climate-resilience_dma (1).pdf

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in regulation
Risks driven by changes in physical climate parameters

Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
General environmental regulations, including planning	Planning Approvals and Climate Change Assessments - particularly in relation to floodplain risk management, are increasingly expected as part of the planning approval process for property development in Australia. This reduces the amount of developable land, and creates the risk of either the project not being approved or the project approval being delayed due to inability to demonstrate level	Increased capital cost	1 to 3 years	Direct	Likely	Low-medium	The figure could be significant but varies based on project type and size. It would invariably increase if climate change risks were not considered in acquisition and/or planning stage. For example, if 2% of Stockland's residential portfolio (ie end-market value of $20.4 billion as at 30 June 2014) was deemed not suitable for development, this would lead to an adverse valuation of	Stockland conduct Climate Change Assessments for potential acquisitions to assess the climate change risks inherent at each site. This is an integral part of our planning and acquisition process. Our ability to meet the required conditions for approvals is strong given demonstrated climate change adaptation management and performance.	Climate Change Assessments on new developments cost approximately $8000 for a full scale assessment. This cost is factored into development budgets, and is a minor investment given the financial risk it enables us to offset.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	of due diligence/ management required.						approximately $400 million. As we already have processes in place to assess climate change risks, we do anticipate additional significant financial implications.		
Product efficiency regulations and standards	Regulation does not currently addresses the full range of climate risks in terms of built form. The current National Construction Code (NCC) requires buildings to be designed and constructed to withstand climate related hazards such as cyclones, extreme winds, intense rain, bushfire, snow and flood, as appropriate to their location. However, the NCC does not	Increased operational cost	1 to 3 years	Direct	About as likely as not	Medium	New costs and requirements for additional resources in the built environment to meet new regulation and requirements under a revised NCC. It is difficult to estimate costs more accurately as it would be dependent on the proposed legislative change and the required response. However, as we already focus on climate resilience	We have worked on identifying potential vulnerabilities in our portfolio through climate resilience assessments. These assessments focus on the vulnerability of assets to climate change (in terms of location, design, management and reliance on services and utilities) and its ability to endure severe weather impacts and	The cost of management is associated with undertaking and developing the climate vulnerability and resilience assessments - a process which has now been integrated into the capabilities of key staff. Costs are therefore minimal and include travel and accommodation costs associated with undertaking assessments, in a range of $1000-$5000.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	cover hail, storm tide or have specific requirements relating to heat stress, aside from prescribed requirements for energy efficiency. The Australian Building Codes Board (ABCB) released a draft discussion paper in April 2014 which aims to engage stakeholders on the resilience of buildings to extreme weather events. The purpose of the paper is to inform stakeholders of the ABCB's preliminary views on resilience to extreme weather events, to seek feedback and obtain responses to a number of questions to help inform the ABCB on the						in the design of our assets, we do not anticipate any significant additional costs. As an indication, Stockland conducted an assessment of climate change risks at our Rockhampton shopping centre and implemented a plan to improve the cyclone resilience of this centre at an approximate cost of $700,000.	operate without disruption. We focus on anticipating emerging regulation, building awareness and preparing for potential future regulatory requirements. We are working closely with industry bodies to develop our adaptation and resilience work into standards for industry-wide performance in this space. We have specifically been working with the Property Council of Australia on a property resilience tool for industry and are waiting for advice on our funding application.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	appropriate way forward. This may lead to greater regulation around climate resilience in construction and impose new costs and requirements for additional resources in the built environment. This could lead to increased development costs for Stockland and delayed development schedules.								
Uncertainty surrounding new regulation	There has been a moderate level of uncertainty regarding specific environmental regulation, including a price on carbon. This has created uncertainty in the market as it is unclear whether or not a carbon price will be re-instated at a later	Increased operational cost	Up to 1 year	Direct	About as likely as not	Low	Costs associated with training resources and re-aligning initiatives to meet new government policy and approach to achieve national emission reduction targets. As an indication, when a carbon price was introduced in	Maintain a close watch on, and work with industry bodies to influence emerging policy and regulation which may impact our operations.	No additional cost - this is a core responsibility of our Stakeholder Relations team.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	stage due to international pressures. This uncertainty presents financial risks surrounding our operational costs and the costs of Stockland's future developments.						Australia in FY13 (later withdrawn), we estimated that this led to a 10% increase in our annual electricity costs. It is difficult to estimate costs more accurately as it would be dependent on the proposed legislative change and the required response.		

CC5.1b

Please describe your inherent risks that are driven by change in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Sea level rise	Based on an internal risk analysis conducted in	Reduction/disruption in production capacity	>6 years	Direct	Likely	Low-medium	Financial loss relating to loss of entire tracts of development land	All projects are required to review sea level rise and flooding risk in the	These measures are integrated into our standard

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	2011 across our portfolio of assets, sea level rise presents the risk to which our portfolio has the greatest exposure. The risk analysis investigated impacts from sea level rise, wave run-up and flooding risk. While the NSW coastline is predicted to have the greatest increase, the report indicates that Queensland coastal areas will also be significantly exposed to predicted rise in sea levels and floods. Sea level risk in these areas is likely to give						and loss/impact on existing assets. Value would vary depending on size and nature of the land/asset impacted and the severity of the impact. As an indication, if 2% of Stockland's residential portfolio (ie end-market value of $20.4 billion as at 30 June 2014) was impacted or deemed not suitable for development, this would lead to an adverse valuation of approximately $400 million. Indirect financial impacts if communities surrounding Stockland's shopping centres are impacted and therefore unable to access the centres due to salt water inundation. As we already focus on	acquisition/planning stage. High risk projects (according to location) must conduct a climate adaptation assessment using the Climate Vulnerability and Resilience Assessment Tool. These assessments focus on the vulnerability of assets to climate change and the ability to endure severe weather impacts and operate without disruption. Where specific risks are identified, suitable mitigation or correctional measures must be included in asset-specific action plans, with actions implemented and tracked.	approach to project development (i.e. to meet project approval gateways) so costs are incorporated into project budgets and requirements. The expertise to conduct climate vulnerability and resilience assessments has been developed internally and assessments are now conducted at minimal cost to the business as it is incorporated into the roles and responsibilities of our existing resources. The only costs are travel and accommodatio

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	rise to indirect impacts on communities and infrastructures surrounding Stockland's assets.						climate resilience in the design of our assets and the selection of our sites, we do not anticipate any significant impacts or additional costs.		n in a range of $1000-$5000.
Change in mean (average) temperature	The 2011 risk analysis indicated that higher mean temperatures were another climate change impact to which our portfolio had significant exposure. More frequent warmer/hotter days will increase demand for ventilation and air conditioning, leading to higher operating costs due to increased maintenance	Increased operational cost	1 to 3 years	Direct	Likely	Low	Increased operating and maintenance costs for Stockland's assets due to increased demand on HVAC systems. It is estimated that this could lead to a 5% increase in the system operating costs. For our Commercial Properties business for example, with an annual HVAC operating cost of $6.21million, this represents approximately $300,000 annually.	Potential at risk projects (based on location) must conduct a climate vulnerability and resilience assessment. These assessments focus on the vulnerability of assets to climate change and the ability to endure severe weather impacts and operate without disruption. Where specific risks are identified, suitable mitigation or correctional measures must be included in asset-specific action plans, with actions implemented and tracked. Current initiatives across	The cost of management is associated with undertaking and developing the climate vulnerability and resilience assessments - a process which has now been integrated into the capabilities of key staff. Costs are therefore minimal and include travel and accommodation costs associated with undertaking assessments, in a range of $1000-$5000.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and energy consumption. Changes in mean average temperatures will also impact the health and wellbeing of our residents.							our retail portfolio include detailed assessment of optimal operating conditions for our HVAC units (i.e. using minimal energy to maintain optimum temperature).	
Change in temperature extremes	Higher maximum daily temperatures were identified in our 2011 risk analysis as another climate change effect to which our portfolio had significant exposure. Heat waves in Australia are virtually certain to increase in frequency and intensity. This will seriously impact our residents, particularly	Wider social disadvantages	1 to 3 years	Indirect (Client)	Likely	Medium	Increased operating and maintenance costs for Stockland's assets due to increased demand on HVAC systems. It is estimated that this could lead to a 5% increase in the system operating costs. For our Commercial Properties business for example, with an annual HVAC operating cost of $6.21million, this represents approximately $300,000 annually.	Potential at risk projects must conduct a climate adaptation assessment using the climate vulnerability and resilience assessment tool. Where specific risks are identified, suitable mitigation or correctional measures must be included in asset-specific action plans, with actions implemented and tracked. We also ensure energy efficiency and natural ventilation of Retirement Living villages using the Green Star	Stockland's potential at risk projects must conduct a climate adaptation assessment using the climate vulnerability and resilience assessment tool. This is conducted by Stockland employees at minimal cost. Costs include travel and accommodation in a range of $1000-$5000. Where specific risks are identified,

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	our more vulnerable Retirement Living residents, and increase the demand for air conditioning and overall energy consumption, leading to higher operating costs due to increased maintenance and energy consumption. Heat waves can also lead to bushfires, destroying a large number of homes and potentially fatalities.							standards.	suitable mitigation or correctional measures must be included in asset-specific action plans, with actions implemented and tracked. We also ensure energy efficiency and natural ventilation of Retirement Living villages using the Green Star standards for design and construction of retirement living assets. Health and Wellbeing initiatives are also a requirement in all asset and development plans with budget assigned accordingly.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Tropical cyclones (hurricanes and typhoons)	The most significant risk identified in our 2011 climate risk assessment was an increase in frequency and severity of storms. Intense tropical cyclone activity increases the incidence of flood and high winds. Increased frequency and impact of extreme weather may also lead to increasing insurance premiums and the possibility of not being able to insure property in vulnerable locations. The unpredictability and extreme	Reduction/disruption in production capacity	1 to 3 years	Direct	Likely	Medium	Costs associated with project delays and/or significant structural damage to development sites, construction activities or existing assets. Costs associated with improving the climate resilience of our assets. As an indication, Stockland conducted an assessment of climate change risks at our Rockhampton shopping centre and implemented a plan to improve the cyclone resilience of this centre at an approximate cost of $700,000.	Ensuring resilience of assets through resilience assessments. These assessments focus on the vulnerability of assets to climate change and the ability to endure severe weather impacts and operate without disruption. We also systematically assess our suppliers/contractors to ensure climate change related impacts are considered in project planning and delivery.	The cost of management is associated with undertaking and developing the climate vulnerability and resilience assessments - a process which has now been integrated into the capabilities of key staff. Costs are therefore minimal and include travel and accommodation costs associated with undertaking assessments, in a range of $1000-$5000. Costs may also include the cost of building retuning/ repair following a cyclone. As an indication, Stockland incurred a cost

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	nature of these events may lead to structural damage of our assets and the disruption of our operations during and immediately following an event. It also presents a significant indirect risk via the impact on development activities managed by our supply chain in high risk areas.								of approximately $120,000 at a shopping centre in Rockhampton following damage to air conditioning equipment due to an extreme weather event. There are no additional management costs involved in screening suppliers as this is integrated into current contractor management system.
Change in precipitation extremes and droughts	Australia is the driest inhabited continent on earth, heavily exposed to extreme heat and drought as well as large-scale flooding.	Reduction/disruption in production capacity	1 to 3 years	Direct	Likely	Low	Drought would impact us directly (through increased cost of water to develop/service our assets) and indirectly (through visual amenity and appeal issues linked to drought and through	Water sensitive urban design is considered in the design and build of our assets, with water consumption addressed across our Commercial Property portfolio to ensure effective management and	The cost of management is associated with undertaking and developing the climate vulnerability and resilience assessments - a process which is now

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	These events are influenced by many factors and while their occurrence is difficult to accurately estimate, the trend is towards larger, more intense events. Droughts will see the cost of water utilities increase as water security becomes a more serious issue for Australia. Large scale flooding will impact the operation of our business and lead to potential disruption of our services.						increased cost of water placing additional stress on customers/tenants). As an indication, for Commercial Properties, with an annual water cost of approximately $3.5 million in FY14, a 10% increase in water costs would lead to an annual cost increase of approximately $350,000. Flood would also impact our business due to structural damage to our assets and business continuity impacts for our tenants. It is difficult to estimate costs associated with drought more accurately as it would depend on the location and severity of the drought and Stockland's required response.	minimal use of the resource. All projects are required to review sea level rise and flooding risks in the acquisition/planning stage. High risk projects must conduct a climate adaptation assessment using the climate vulnerability and resilience assessment tool. Where specific risks are identified, suitable mitigation or correctional measures must be included in asset-specific action plan with actions implemented and tracked.	conducted internally. Costs are therefore minimal and include travel and accommodation costs associated with undertaking the assessments, in a range of $1000-$5000. Other costs are dependent on the nature of identified initiatives.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							However, as we already focus on climate resilience in the design and site selection of our assets, we do not anticipate any significant additional costs.		

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Stakeholders are increasingly looking to understand what organisations are doing to manage climate change risks. This is particularly important as business	Reduced stock price (market valuation)	1 to 3 years	Direct	Likely	Low	Stockland would be impacted financially if our reputation for climate resilience was damaged and we were therefore no longer considered an investment of choice (therefore impacting access to capital). There would also be financial	Stockland has an active Stakeholder Relations team which ensures climate change issues remain on the radar and that the company responds to any concerns quickly and	Climate-related reputation is part of the mandate of the Stakeholder Relations team. There is therefore no additional/specific cost associated with management of this risk.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	partners and investment advisors place increasing value on intangible dimensions such as risk management, brand, reputation and employee engagement. If Stockland were to lower its focus on climate change resilience, it risks damage to its reputation and reduced demand for its assets.						implications of reduced market share and missed opportunities if Stockland was not considered a developer or partner of choice. However, as we already focus on climate resilience in the design and operation of our assets, we do not anticipate any reputational damage or additional costs.	effectively to minimise potential reputational damage.	
Changing consumer behaviour	In some facets of Stockland's business, customers are increasingly engaged on sustainability issues, with growing expectations around the sustainability performance of	Reduced demand for goods/services	1 to 3 years	Direct	Likely	Low	Stockland would be impacted financially if our reputation for climate resilience and we were unable to attract tenants/customers to our assets. This risk will increase over time as other new buildings are developed with modern and efficient	Ensure that all our assets have a minimal level of sustainability performance which ensures maximum benefit to our customers in terms of reduced operating cost/living costs	Costs involved in design and development of assets in accordance with Green Star, and also costs involved in upgrading and refurbishing existing assets to ensure their enhanced sustainability

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	assets. Some tenant groups, including government, have stated their intention to only occupy buildings that meet minimum sustainability (energy efficiency) requirements. If Stockland were to lower its focus on climate change resilience, it risks damage to its reputation and reduced demand for its assets.						fixtures. It is difficult to estimate the exact financial impact of this risk as it would depend on the extent on downturn in demand from tenants or customers. However, as we already focus on climate resilience in the design and operation of our assets, we do not anticipate any change to consumer behaviour due to this risk.	and improved environmental performance. Continuous improvements and upgrades across our assets to ensure they maintain high level performance.	performance. Consultant costs associated with each Green Star project are approximately $120,000.
Other drivers	Greater push to identify, measure and monitor Scope 3 emissions which will require increased resources to be invested in the initial set up of data collection systems and in	Increased operational cost	1 to 3 years	Direct	Very likely	Low-medium	Increased capital expenditure to set up data collection and management systems and increased operational expenditure as additional resources will be required to collect, collate and manage data. Minimal changes	Closer focus on emissions performance of our suppliers and customers. Ensuring systems are in place to capture information in the most effective and efficient way	Additional time for the team to ensure systems are in place to capture information. This may lead to a minimal increase in cost to manage as management methods can be easily integrated into existing approaches to

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the ongoing measurement and management of emissions data from across the company's value chain. This may lead to increased costs and effort to capture required data.						would be absorbed by the current team, however a significant change may require a change to systems to accommodate the new requirements. This may require consultant fees, potentially ranging from $10,000-$50,000. These costs are absorbed by the fee we pay annually to upgrade our Environmental Management System of $120,000.	possible to minimise strain on resources.	project management and customer engagement.

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation
Opportunities driven by changes in physical climate parameters
Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Product labelling regulations and standards	Commercial Building Disclosure - the introduction of mandatory disclosure of commercial building energy efficiency. This could lead to an increase in data and effort required to respond to these changes. Stockland has obtained NABERS Energy and Water ratings for a majority of its office assets so is well placed to respond to this regulation.	Other: Competitive advantage	1 to 3 years	Direct	Virtually certain	Low	This is an opportunity for Stockland to be prepared and pre-empt more stringent reporting regulation, Stockland will be ahead of its peers in terms of meeting the regulatory requirements should they be enforced.	Stockland manages this opportunity by maintaining NABERS Energy and Water ratings across its portfolio of office assets and targeting an improvement in portfolio-wide average of 4.5.	All costs are integrated into current operational costs, with maintenance of NABERS ratings costing an average of $3,500 to maintain annually (excluding costs associated with asset upgrades to enhance asset rating performance).
Cap and trade schemes	The Energy Savings Scheme (ESS) is governed by NSW legislation. It reduces electricity consumption in NSW by creating financial incentives for	Other: Revenue generation	1 to 3 years	Direct	Very likely	Low-medium	Stockland has traded ESC's in 2012 (all office) and more recently in March this year (office and retail). On 9 March 2015, we traded 14,337 certificates	As an Accredited Certificate Provider under the ESS, we must ensure we manage all our data/reporting in accordance with the requirements	Minimal cost, managed as part of business as usual activities. While there are costs associated with the upgrade of assets to generate

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	organisations to invest in energy savings projects. Energy savings are achieved by installing, improving or replacing energy savings equipment. The ESS has enabled Stockland to accrue credits annually, creating a potential revenue generator for the company. Energy Savings Certificates (ESC's) are created for projects and initiatives that reduce energy consumption. One 'ESC' represents 1 tonne/CO2 and has a dollar value which can be traded in an open market. Buyers are typically energy						accumulated between 2012 and 2014 at a price of $17.90 for an income of $256,632. To date we have traded over 20,000 ESC's and realised $421,000 of income. We will create new ESC's again with this year's NABERS ratings and will look to trade again in 2017.	set by the Scheme. As such, the requirements are integrated into our management system and responsibility is assigned to a member of the sustainability team to monitor and maintain the systems and associated processes.	credits, these costs would be undertaken anyway to meet internal energy targets.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	retailers to meet mandatory energy savings reporting obligations using a NABERS benchmarking method.								

CC6.1b

Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) temperature	Higher mean temperatures in our areas of operation will drive greater traffic to our retail centres as people seek cool, public areas in which to spend their time. This will also lead to increased demand for	Increased demand for existing products/services	1 to 3 years	Indirect (Client)	Likely	Low	Increased revenues for our retail tenants and therefore demand from tenants for Stockland retail space. In 2014, Stockland's tenants saved over $4 million in energy bills as a result of energy efficiency	Stockland manages this opportunity by ensuring that our retail centres are resilient to climate change and remain attractive and enjoyable areas in which the community choose to spend time, and	Costs associated with energy efficiency initiatives, building upgrades etc. These are factored into annual asset plans and if they meet required Return on Investment criteria, they are integrated into operational

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	more efficient design as potential tenants seek highly efficient (lower energy cost) premises. This could lead to increased demand for Stockland's assets.						improvements across the Commercial Property portfolio. This is outlined on page 6 of Stockland's 2014 Shareholder Review.	that they are able to operate effectively at high capacity (car parks, lifts etc).	budgets. As an example, a LED lighting upgrade at the Stockland Merrylands shopping centre in 2014 required a capital investment of $132,000, with a Return on Investment in the first 12 months of 53%.
Change in temperature extremes	Market demand for more efficient design as potential tenants seek highly efficient (lower energy cost) premises. This could lead to increased demand for Stockland's assets.	Increased demand for existing products/services	1 to 3 years	Direct	Likely	Low-medium	Positive financial implications of maintaining minimal vacancy rates across our portfolio by having highly efficient and therefore attractive assets. In 2014, Stockland's tenants saved over $4 million in energy bills as a result of energy efficiency improvements across the	Stockland manages this opportunity by ensuring that our assets are continuously assessed and upgraded to ensure energy efficiency is optimised and in line with best practice.	Costs associated with energy efficiency initiatives, building upgrades etc. These are factored into annual asset plans and if they meet required Return on Investment criteria, they are integrated into operational budgets. As an example, the implementation of smart monitoring (COZero EnergyLink) at the Stockland Gladstone

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							Commercial Property portfolio. This is outlined on page 6 of Stockland's 2014 Shareholder Review.		shopping centre required a capital investment of $50,400 with a Return on Investment of 108% in the first 12 months.
Induced changes in natural resources	As natural resources become scarcer and more costly, those companies with more efficient operations will be best placed in the market. As such, having highly efficient assets will increase our competitive advantage and ability to respond to market demand.	Increased demand for existing products/services	1 to 3 years	Direct	Likely	Low-medium	Positive financial implications from increased market demand and cost savings due to ongoing efficiency initiatives. In 2014, Stockland's tenants saved over $4 million in energy bills as a result of energy efficiency improvements across the Commercial Property portfolio. This is outlined on page 6 of Stockland's 2014	Continuous improvement across our assets to ensure that efficiency is constantly enhanced at every opportunity. In addition to lighting and physical upgrades, this also includes assessing the optimal load at which our air conditioning equipment operates to ensure minimal energy use, assessing the frequency and quantity of our waste disposal	Costs associated with individual efficiency improvement initiatives. As an example, a LED lighting upgrade at the Stockland Merrylands shopping centre in 2014 required a capital investment of $132,000, with a Return on Investment in the first 12 months of 53%.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							Shareholder Review.	and monitoring water use across our assets.	
Other physical climate opportunities	The frequency of extreme weather events is predicted to increase due to climate change. This means that residential and commercial properties are at risk of damage. There is an opportunity for Stockland to continue to improve the climate resilience of its assets and therefore incur lower insurance premiums.	Reduced operational costs	1 to 3 years	Direct	Likely	Low-medium	Reduced deductibles insurance claims. Following a cyclone this year, an insurance provider agreed to reduce the insurance deductible for Stockland's assets by $150,000 due to the completion of cyclone vulnerability assessment and resilience works.	Potential at risk projects (based on location) must conduct a climate vulnerability and resilience assessment. These assessments focus on the vulnerability of assets to climate change and the ability to endure severe weather impacts and operate without disruption. Where specific risks are identified, suitable mitigation or correctional measures must be included in asset-specific action plans, with actions implemented	The cost of completing climate vulnerability and risk assessment, which are completed internally and at minimal cost (travel and accommodation only) in a range of $1000-$5000. Cost of climate resilience initiatives as identified.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								and tracked.	

CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Ensuring the climate resilience of our developments so that they continue to be great places to live now and into the future. This safeguards our brand, demonstrates the value of our assets, promotes trust and customer satisfaction which drive referrals and ongoing sales and revenue.	Wider social benefits	>6 years	Direct	Likely	Low-medium	Positive financial implications associated with long term brand value and demand for Stockland's assets. As this is a long-term opportunity associated with enhancing brand value, it is difficult to more accurately estimate the extent of the financial implication.	Energy efficiency and climate change resilience are considered, assessed and managed across all our assets as part of our development process and operating procedures, including Sustainability policies and toolkits for our different business units, assets and developments.	Integrated into the way we do business. Resilience assessments are undertaken internally at a minimal cost involving travel and accommodation costs, in a range of $1000-$5000.
Reputation	Reputation benefits associated with	Wider social benefits	>6 years		Likely	Low-medium	Positive financial implications associated with	Stockland is working with a consultant to	Consulting fees of approximately $30,000.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	supporting the communities in which we operate to become more resilient, including to climate change.						increased market share from customer loyalty and long term brand value. As this is a long-term opportunity associated with enhancing brand value, it is difficult to more accurately estimate the extent of the financial implication.	develop a community resilience scorecard. The scorecard is designed to measure and manage the resilience of communities and help them bounce back from external stresses and shocks such as climate change.	

CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Attachments

https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC6.ClimateChangeOpportunities/sto0055_shareholderreview2014_web.pdf

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Tue 01 Jul 2008 - Tue 30 Jun 2009	3016

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 2	Tue 01 Jul 2008 - Tue 30 Jun 2009	120001

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
Australia - National Greenhouse and Energy Reporting Act

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	Other: National Greenhouse Accounts (NGA) Factors
CH4	Other: National Greenhouse Accounts (NGA) Factors
Other: N20	Other: National Greenhouse Accounts (NGA) Factors
HFCs	Other: National Greenhouse Accounts (NGA) Factors

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference

Further Information

Attachments

https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC7.EmissionsMethodology/FY14_ghg_factors.xlsx

Page: CC8. Emissions Data - (1 Jul 2013 - 30 Jun 2014)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

22102

CC8.3

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

99927

CC8.4

Are there are any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of Scope 2 emissions excluded from this source	Explain why the source is excluded

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Assumptions Metering/ Measurement Constraints	Assumptions: the data boundary ignores extremely small emissions that are part of property management e.g. fire extinguishers. These small emissions account for less than 0.5%. Measurement Constraints: Our residential and retirement living development businesses face a number of challenges reporting on the activities of contractors and thus rely on the third party data.
Scope 2	Less than or equal to 2%	Extrapolation	We apply a comprehensive estimation methodology across any data that has not accrued at the time of reporting. Thus a level of uncertainty exists due to the nature of estimated data versus the actual emissions, which was less than 1% in FY14.

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance complete

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Reasonable assurance	https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/CC8.6a/stockland-sustainability-assurance-opinion-2014.pdf	Page 1	ISAE 3410	100
High assurance	https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/CC8.6a/sgp_msr_assurancestatement_20140918-final-2.pdf	Page 1 - high level assurance for AA1000 AccountABility Principles (2008) and moderate level assurance of the accuracy and quality of the sustainability information.	AA1000AS	100

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

CC8.7

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

Third party verification or assurance complete

CC8.7a

Please provide further details of the verification/assurance undertaken for your Scope 2 emissions, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Reasonable assurance	https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/CC8.7a/stockland-sustainability-assurance-opinion-2014.pdf	Page 1	ISAE 3410	100
High assurance	https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/CC8.7a/sgp_msr_assurancestatement_20140918-final-2.pdf	Page 1 - high level assurance for AA1000 AccountABility Principles (2008) and moderate level assurance of the accuracy and quality of the sustainability information.	AA1000AS	100

CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
Year on year emissions intensity figure	Assured by Net Balance as part of AA1000AS sustainability assurance.
Year on year change in emissions (Scope 1 and 2)	Assured by Net Balance as part of AA1000AS sustainability assurance.

Additional data points verified	Comment
Progress against emission reduction target	Assured by Net Balance as part of AA1000AS sustainability assurance.
Emissions reduction activities	Assured by Net Balance as part of AA1000AS sustainability assurance.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

FY13 emissions were restated in the FY14 Stockland Annual Report due to improvements in data processes in the Retirement Living business. FY13 Scope 1 emissions were restated as 18,509 TCO2e, Scope 2 emissions were restated as 104,393 TCO2e. These restated figures have been used to calculate year on year changes in emissions. Further details can be found in the attached FY14 environmental data pack published along with Stockland's 2014 Sustainability Report. The Australian Clean Energy Regulator (CER) publishes the total Scope 1 and 2 emissions for entities reporting under the National Greenhouse and Energy Reporting Scheme (NGERS). A minor variance will occur between the emission figures reported in our Sustainability Report and those submitted to the CER in our NGERS report due to the timing of disclosure. Our sustainability report includes estimations for where data is not available at the end of the financial year in time for the corporate reporting release. The NGER report is submitted later in the year and uses a data set with actual emissions replacing the estimates. The gross totals submitted to the CER are: Scope 1 21,550TCO2e; and Scope 2 100,527TCO2e. The NGER submission is also assured as noted in the PwC assurance statement. This CDP submission references the emissions data from Stockland's sustainability report as the data is more widely available and includes commentary on performance. The data published by the CER is uniquely the gross Scope 1 and 2 totals.

Attachments

https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC8.EmissionsData(1Jul2013-30Jun2014)/environmental-data.pdf

Page: CC9. Scope 1 Emissions Breakdown - (1 Jul 2013 - 30 Jun 2014)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

No

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By business division
By activity

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
Commercial Property	3311.5
Retirement Living	541.6
Residential Communities	18161.5
Corporate	87.2

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Office Buildings	832.2
Industrial Facilities	1.4
Retail Centres	97.5
Fleet Vehicles	87.2
Refrigerants	2380.4
Residential Communities	19.2
Residential Contractors	18142.3
Retirement Living Villages	376.7
Retirement Living Contractors	164.9

CC9.2e

Please break down your total gross global Scope 1 emissions by legal structure

Legal structure	Scope 1 emissions (metric tonnes CO2e)

Further Information

Environmental data pack published as a part of Stockland's 2014 Sustainability Report is attached. Please note that the emissions for FY13 have been restated for Retirement Living (since our 2013 CDP submission) in Stockland's FY14 Annual Review and Sustainability Report, which has affected the gross emissions reported for FY13. The variance analysis provided throughout this CDP submission are all based on the restated FY13 figures from the Sustainability Report (as per the attached environmental data) and not based on last year's CDP submission.

Attachments

https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC9.Scope1EmissionsBreakdown(1Jul2013-30Jun2014)/environmental-data.pdf

Page: CC10. Scope 2 Emissions Breakdown - (1 Jul 2013 - 30 Jun 2014)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

No

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division
By activity

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions (metric tonnes CO2e)
Commercial Property	84116.1
Residential Communities	2484.6
Retirement Living	11921.0
Corporate	1405.6

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions (metric tonnes CO2e)

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions (metric tonnes CO2e)
Corporate Tenancies	1405.6
Office Buildings	23161.0
Industrial Facilities	2997.7

Activity	Scope 2 emissions (metric tonnes CO2e)
Retail Centres	57957.4
Residential Communities	1852.5
Residential Contractors	632.1
Retirement Living Villages	11870.0
Retirement Living Contractors	50.9

CC10.2d

Please break down your total gross global Scope 2 emissions by legal structure

Legal structure	Scope 2 emissions (metric tonnes CO2e)

Further Information

Environmental data pack published as a part of Stockland's 2014 Sustainability Report is attached. Please note that the emissions for FY13 have been restated for Retirement Living (since our 2013 CDP submission) in our 2014 Annual Review and Sustainability Report, which has affected the gross emissions reported for FY13. The variance analysis provided throughout this CDP submission are all based on the restated FY13 figures (as per the attached environmental data from the Sustainability Report) and not based on last year's CDP submission.

Attachments

https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC10.Scope2EmissionsBreakdown(1Jul2013-30Jun2014)/environmental-data.pdf

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

CC11.2

Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Fuel	7431
Electricity	111995.2
Heat	20.0
Steam	0
Cooling	590.6

CC11.3

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Diesel/Gas oil	291
Motor gasoline	45
Biogasoline	3
Natural gas	7108

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the Scope 2 figure reported in CC8.3

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comment
Non-grid connected low carbon heat, steam or cooling, generation owned by company	1897	A Trigeneration plant is installed in the Stockland head office building in Sydney which provides low carbon energy to the base building and Stockland tenancy. The operation of the plant is controlled by a third party supplier and Stockland procures thermal and electrical energy from that supplier.

Further Information

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Increased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions	1.2	Decrease	Commercial Property: Emissions reduction activities primarily take place in our commercial property

Reason	Emissions value (percentage)	Direction of change	Comment
reduction activities			operations. FY13 total emissions (excluding emission reductions from divestments) were 86,314 TCO2e, FY14 total emissions (excluding emission reductions from divestments) were 84,854 TCO2e, therefore a 1,460 TCO2e reduction in emissions. Total reduction from FY13 to FY14 on a like for like asset basis is 1,450 TCO2e. As a percentage of total FY13 emissions, this is 1460/122902=0.012=1.2%.
Divestment	4.2	Decrease	Commercial Property: 11 assets divested in FY13 which had emissions reported for only part of FY13 to the value of 4,608 TCO2e which were avoided in FY14. 2 assets divested in FY14 which had emissions reported for FY13 (752 TCO2e) and part of FY14 (192 TCO2e) amount to 560 TCO2e avoided in FY14. Total emissions avoided during FY14 from commercial property divestments amounted to 5,168 TCO2e. This % reduction is calculated by dividing this by our FY13 scope 1 and 2 emission reduction (122902kgCO2) - 5168/122902=0.042=4.2%
Acquisitions			
Mergers			
Change in output	4.8	Increase	Residential Communities: Total Scope 1 and 2 FY13 emissions were 16,824 TCO2e, total FY14 emissions were 20,654 TCO2e, therefore a 3,830 TCO2e increase in emissions. This change in output is due to improved market conditions and a response to demand for residential products. The emissions have predominantly come from an increase in our contractor's fuel combustion on site. Retirement Living: Total Scope 1 and 2 FY13 emissions were 10,388 TCO2e, total FY14 emissions were 12,463 TCO2e, therefore a 2,075 TCO2e increase in emissions. This change in output is due to additional units being delivered at villages but with small a reduction in development activity. Total additional emissions during FY14 from change in output amount to 5,906 TCO2e. This % of total FY14 emissions is calculated as 5906/122902=0.048=4.8%
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified	1	Decrease	From miscellaneous sources such as corporate tenancies, refrigerant fugitive emissions as well as rounding in the above calculations and converting our reported emissions from kgCO2e to TCO2e.
Other			

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.000063	metric tonnes CO2e	unit total revenue	11.5	Decrease	Scope 1 and 2 emissions increased by 0.7% from last year. The change in the intensity figure can largely be attributed to the improvement of 12% in total revenue in FY14, which has led to a reduced intensity figure for this financial year. The % change from previous year has been calculated based on the restated FY13 total emissions noted in the further information box. As such this is not a comparison of the data provided in last year's CDP submission.

CC12.3

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
94.9	metric tonnes CO2e	FTE employee	2.6	Decrease	Scope 1 and 2 emissions increased by 0.7% from last year. The change in the intensity figure can largely be attributed to a minor increase (1.9%) in FTE. The % change from previous year here has been calculated based on the restated FY13 total emissions noted in the further information box. As such this is not a comparison of the data provided in last year's CDP submission.

CC12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.059	metric tonnes CO2e	square meter	4	Decrease	Retail Centre Operations: GHG emissions per unit of net lettable area. This change is driven primarily by an ongoing program of energy efficiency initiatives across the retail centre portfolio and vacancy rates. The % change from previous year stated in this question is not affected by the FY13 emissions restatement as the retirement living portfolio is not included in this metric.
0.0676	metric tonnes CO2e	square meter	6	Decrease	Office Building Operations: GHG emissions per unit of net lettable area. This change is driven primarily by an ongoing program of energy efficiency initiatives across the office building portfolio and vacancy rates in addition to the divestment of underperforming assets. The % change from previous year stated in this question is not affected by the FY13 emissions restatement as the retirement living portfolio is not included in this metric.

Further Information

Please note that the emissions for FY13 have been restated for Retirement Living (in Stockland's FY14 Annual Review and Sustainability Report) which has affected the gross emissions reported for FY13. The variance analysis provided throughout this CDP submission are all based on the restated FY13 figures and not based on last year's CDP submission. Restated FY13 emissions can be found in the attached environmental data pack and Energy and Emissions DMA (published on Stockland's website).

Attachments

https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/sto0061-financial-report_web.pdf
https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/environmental-data.pdf

https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/5.-energy-and-emissions_dma.pdf
https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/people-data.pdf

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

Yes

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
Other: NSW Energy Savings Scheme	Sun 01 Jan 2012 - Mon 31 Dec 2012	4191	0	4191	Facilities we own and operate
Other: NSW Energy Savings Scheme	Tue 01 Jan 2013 - Tue 31 Dec 2013	3206	0	3206	Facilities we own and operate
Other: NSW Energy Savings Scheme	Wed 01 Jan 2014 - Wed 31 Dec 2014	6940	0	6940	Facilities we own and operate

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

Stockland is involved in the New South Wales Energy Savings Scheme. This scheme places a mandatory obligation on Liable Entities to obtain and surrender Energy Savings Certificates (ESCs) to meet annual energy savings targets. We are an Accredited Certificate Provider, creating ESCs that can be sold to Liable Entities or other voluntary parties.

We create ESCs by carrying out Recognised Energy Savings Activities (RESA) including: the replacement and installation of common electrical appliances; high efficiency lighting and other energy saving devices; the NABERS rating of buildings and changes in electricity consumption measured against an established baseline. Our strategy for complying with the scheme is to ensure these requirements are integrated into our management system and that responsibility is assigned to a member of the sustainability team to monitor and maintain the system and associated processes.

The scheme requires an annual reporting statement to be provided to the scheme administrator, NSW Independent Pricing and Regulatory Tribunal (IPART). Stockland has complied with this requirement since commencement of participation.

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit	Energy	The MBM - NABERS Baseline calculation sub-method is	Other:	5073		Not	Other:

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Origination	efficiency: industry	used to establish an electricity consumption baseline and calculate Energy Savings. The buildings in our portfolio eligible to use the NABERS baseline approach are our offices and shopping centres. In 2009, Stockland obtained approved NABERS Ratings for a selection of our Commercial Property assets, and as long as our performance demonstrates an improvement against this baseline rating each year we are able to generate Energy Savings Certificates annually.	NABERS Metered Baseline Method			relevant	Opportunity

Further Information

Attachments

https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC13.EmissionsTrading/2012 Vintage Tax Invoice.pdf
https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC13.EmissionsTrading/2014 Vintage Tax Invoice.pdf
https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC13.EmissionsTrading/2013 Vintage Tax Invoice.pdf

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization’s Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Not relevant, explanation provided				Emissions data from contractors and suppliers involved in our Residential and Retirement Living developments is captured within our Scope 1 + 2 emissions data, as their activities fall within our operational control boundary. The contractors and suppliers working on our Commercial Property developments do not fall within our operational control boundary and so we do not collect or report data on their emissions - this is managed by the principal contractor/operator on site.
Capital goods	Not relevant, explanation provided				Embodied carbon is negligible as percentage of total emissions.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	19861	Total transmission losses from electricity, gas and fleet fuel. Calculated using National Greenhouse Accounts Scope 3 emission factors.	100.00%	Relevant as it is information requested under NGERS, and reductions are directly related to our reduction in purchased electricity consumption.
Upstream transportation and distribution	Not relevant, explanation provided				Not considered material to our overall emissions - however we do implement specifications to ensure transportation of waste and materials on site is minimised to improve efficiencies and avoid unnecessary fuel consumption.
Waste generated in operations	Relevant, calculated	15853	Calculated using the National Greenhouse Accounts Scope 3 emissions factors, based on waste data collected, reported and assured in Sustainability Report.	100.00%	The reduction of waste to landfill is an ongoing focus for both our development and operational activities. In development: 85% diversion from landfill in our commercial property development construction waste; 98% diversion from landfill for our Residential and Retirement Living contractor waste. In

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					operations: 31% diversion from landfill across our retail centre assets; 53% diversion from landfill across our office building assets.
Business travel	Relevant, calculated	3695	These emissions are calculated for car hire and air travel. Air travel is calculated using the United Kingdom Department of Environment, Food & Rural Affairs standard as the Australian National Greenhouse Accounts do not include conversions for air travel. Car hire is calculated using the Australian Government Green Vehicle Guide.	100.00%	Given the geographical spread of our assets, business travel is considered a material source of Scope 3 emissions for our business.
Employee commuting	Not relevant, explanation provided				As a proportion of our overall emissions this is insignificant.
Upstream leased assets	Not relevant, explanation provided				Not applicable to our business.
Downstream transportation and distribution	Not relevant, explanation provided				Not applicable to our business as we do not "transport or distribute" our assets. Any transportation or distribution associated with our tenants' activities is beyond our scope of control.
Processing of sold products	Not relevant, explanation provided				Not applicable to our business.
Use of sold products	Not relevant, explanation provided				While this is not relevant to our overall emissions performance, as a responsible property developer we work to minimise the emissions generated by our Retirement Living and Residential customers. We

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					have processes in place to ensure optimal energy efficiency in lot design and orientation, to maximise energy efficiency of the built environment in retirement living, and to influence the choices of our residential customers with regard to energy efficient home design. We have initiatives in place to encourage energy efficiency and emissions reduction in our residential communities and the emissions generated by our Retirement Living residents are captured as part of our recorded Scope 2 emissions.
End of life treatment of sold products	Not relevant, explanation provided				Our products are designed for longevity and ongoing upgrade and refurbishment in response to changing climate, operating conditions and/or trends, therefore "end of life" is not a point of focus for our business.
Downstream leased assets	Not relevant, explanation provided				The energy consumption of our retail centres or industrial estate tenants is outside our scope of control, however we do work to positively influence tenant behaviour. The emissions of our office tenants are captured to inform NABERS (National Australian Built Environment Rating System) ratings across our portfolio of office assets.
Franchises	Not relevant, explanation provided				Not applicable to our business.
Investments	Not relevant, explanation provided				Not applicable to our business.
Other (upstream)	Not evaluated				

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Other (downstream)	Not evaluated				

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance complete

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of Scope 3 emissions verified (%)
Limited assurance	https://www.cdp.net/sites/2015/70/17770/Climate Change 2015/Shared Documents/Attachments/CC14.2a/stockland-sustainability-assurance-opinion-2014.pdf	page 1	ISAE 3410	100

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Change in methodology	1.5	Increase	These emissions are from the total transmission and production losses from purchased electricity, gas and fleet fuel. While gross Scope 1 and 2 emissions were on par from last year to this year and Scope 2 emissions reductions were achieved in FY14, the purchased electricity emissions Scope 3 factors for the state of Queensland (which accounts for 29% of overall GHG emissions) increased by 16% for FY14, and have contributed to a counter active slight Scope 3 increase against the reductions in Scope 3 due to energy efficiency initiatives through our the portfolio. Compared to the previous CDP submission, this is a 27% increase that is due to the restatement of the FY13 emissions in the FY14 Annual Review. The analysis included here is based on the actual FY13 figures as restated.
Business travel	Change in output	4	Decrease	While our emissions from car hire has reduced, the material emissions reduction is from air travel due to reduced number of short and medium haul flights within Australia and equates to a 4% decrease in real terms. Compared to the previous CDP submission, this is a 116% increase in emissions. The FY13 annual report significantly understated the emissions (which have been restated in the FY14 annual report) from air travel and a transition to a third party travel management contractor has provided us with greater oversight of the current and historic trends. The emissions factors for long, medium and short haul flights were also updated for FY14 from 0.00031, 0.00029 and 0.00057

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				TCO2e/km to the DEFRA standard.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our suppliers
Yes, our customers
Yes, other partners in the value chain

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

We engage with our suppliers during project delivery.

As part of the tender process we engage with potential suppliers and request detailed outlines of activities underpinning their scope of work. This enables us to identify those contractors who will complete the work with the least amount of material/waste relocation/transportation, ensuring that we are immediately selecting less emission-intensive contractors. We review environmental management credentials of contractors.

As part of the design phase, we engage with suppliers to ensure they understand the technical and environmental requirements of the project and work with them to meet these standards. This engagement is critical for achieving our Green Star certifications.

Throughout construction, we collect and monitor emissions data from our contractors (except for commercial property developments where it does not fall within our operational control boundary).

We have also started to engage more closely with our larger contractors to identify opportunities for performance improvements. We prioritise this more detailed engagement with larger contractors given that they generally have the greatest impact, deliver the most significant stages of project work and have the most mature systems and processes.

We engage with our customers at all three businesses which we operate.

At our Commercial Properties we promote Green Star ratings where these have been achieved during the development or extensions of assets. In high-risk retail centres we engage with local government and community on climate change particularly around extreme weather events. We have been developing strategies to ensure that these retail centres are assessed for climate resilience and as a result systems can be developed so that the assets can be utilised as emergency shelters during extreme weather events.

In the Retirement Living business we developed a custom Green Star rating tool with the Green Building Council of Australia to demonstrate our response to climate change through a third party trademarked certification at our developed retirement villages. We continue to engage with our residents to better understand the climate change drivers which are most pertinent to them.

In the Residential communities business we have been recognised for our developments that have achieved the Green Star - Communities certification. We use this rating to communicate our approach to climate change approach to our potential customers.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend	Comment
314	66%	66% of development related spend. Stockland engage with critical suppliers across all business units on issues of environmental performance and climate change strategies. We request general environmental performance, assess supplier capabilities, require project-specific Environmental Management Plans and specify minimum standards for environmental performance as part of development projects. As part of the design phase, we engage with suppliers to ensure they understand the technical and environmental requirements of the project and work with them to meet these standards. This engagement is critical for achieving our Green Star certifications. In addition, we request and capture emissions data from 61 contractors involved in our Residential communities and Retirement Living developments, as their activities fall within our operational control. We do not collect data from Commercial Property developments where Stockland does not have operational control. We have also started to engage more closely with our larger contractors to identify opportunities for performance improvements. We prioritise this more detailed engagement with larger contractors given that they generally have the greatest impact, deliver the most significant stages of project work and have the most mature systems and processes. Our Project Management team recently embarked on a new initiative in collaboration with our Development, Sustainability and Corporate Communications teams to deliver the first Supplier Roadshow program across our all of our State offices. Guests from our critical contractors and consultants responsible for the delivery of our assets joined us for an afternoon presentation and networking event where we shared our current development pipeline and details of our strategies relating to carbon, broader sustainability, supply chain and health and safety.

CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Identifying GHG sources to prioritize for reduction actions	Given that we capture and report contractor emissions as part of our Scope 1+2 emissions, we use the data collected to identify opportunities to engage with critical suppliers (e.g. development contractors) across our Residential and Retirement Living business to identify opportunities for emissions reductions.

CC14.4d

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Michael Rosmarin Simon Shakesheff	Chief Operating Officer Group Executive, Strategy and Stakeholder Relations	Chief Operating Officer (COO)

Further Information

CDP