

FY19 Sustainability Report



Creating more affordable
and sustainable communities

Message from the CEO

Landcom's international recognition as fourth in the world and third across Asia Pacific in the 2018 and 2019 Global Real Estate Sustainability Benchmark Developer Assessment demonstrates the ongoing success of our commitment to sustainability.

Through the adoption of our Sustainable Places Strategy into the business, we have effectively repositioned Landcom as a leader in delivering more affordable and sustainable communities for the people of NSW.

Our FY19 results show we are well on the way to achieving our goals. This year Landcom was again recognised as a global sustainability leader achieving 4th place globally, and 3rd across Asia Pacific in the Global Real Estate Sustainability Benchmark (GRESB). Landcom is the first and only government land organisation in the world to participate alongside publicly listed and private companies.

We also formalised our commitment to Human Rights as a United Nations Global Compact Participant, prioritised core focus areas of human rights for our business, and adopted our Diversity & Inclusion Policy supported by a staff led working group.

To drive market change for a low carbon economy we launched our first Sustainability Rebates to buyers at Macarthur Heights, supporting residents to reduce their cost of living and environmental impacts. The NSW Minister for Energy & Environment honoured Landcom's effort with a Sustainability Advantage 2019 Bronze recognition award.

Our University Round Table Power Plants collaborative research project team were awarded the 2019 Landscape Architecture Award for Research, Policy and Communications by the Australian Institute for Landscape Architecture. This is an experimental phytoremediation and land management research experiment using plants to remediate post-industrial contamination, and exemplifies Landcom's commitment to innovation that has wide reaching and tangible results for future development.

I am proud of our ongoing commitment to deliver affordable and sustainable communities. It is through these points of difference that we underpin our future financial success and enduring benefits for the people of NSW.



John Brogden AM
CEO, Landcom



FY19 Sustainability Performance Highlights

Sustainable Places Strategy – Four Pillars



 <p>Diversity & Inclusion Policy adopted</p>	<p>4th</p> <p>Awarded fourth most sustainable developer globally, in the Global Real Estate Sustainability Benchmark</p>	 <p>Bronze Award from Sustainability Advantage</p>
 <p>United Nations Global Compact Participant</p>	 <p>AILA Award for Phytoremediation</p>	 <p>Skills Exchange employment pathway program rolled out at Bonnyrigg and Macarthur Heights</p>
 <p>\$15,000 Sustainability Rebate launched at Macarthur Heights to enable sustainable and affordable living</p>	 <p>Partnered with the Property Council of Australia to create the Supplier Engagement Platform aimed at combatting Modern Slavery</p>	 <p>Climate change and community resilience assessments and planning program implemented</p>

About This Report

Our Sustainability Report 2019 is an account of our sustainability performance during the FY19 reporting period, with limited assurance provided by Point Advisory.

This report includes discussion of our material sustainability matters and details our performance against our Sustainable Places Strategy. Where performance against a target has not been achieved (or is not in scope for the reporting period) an explanation is provided.

Our reporting boundaries are explained in the following section. Throughout this report, we disclose our management approach to each of our Sustainable Places Strategy pillars of Climate Resilient Places, Healthy & Inclusive Places, Productive Places and Accountable & Collaborative Places.

This report is prepared in accordance with the Global Reporting Index Standards: Core option.

Reporting Requirements

The *Landcom Corporation Act 2001* (NSW) requires us to report on our sustainability performance each year. The Act states we must adopt sustainability performance indicators that are benchmarked against international best practice.

After extensive community and industry consultation our Sustainable Places Strategy was finalised and endorsed by the Landcom Board in November 2017, and took full effect for Landcom during FY18.

Material Matters

This report identifies and discloses the material aspects of our operations in accordance with the Global Reporting Initiative (GRI) Standards. We have also mapped our material issues and Strategy targets to the United Nations Sustainable Development Goals.

Materiality is an important process that informs how we do business. It provides insight into what our stakeholders value from our developments, and their expectations of the way we operate our organisation.

We use the Global Reporting Initiative's GSSB standard, as well as the AA1000 AccountAbility Principles Standard (2018) in our approach to materiality. We apply GRI's four-stage approach to materiality and boundary guidance, and we execute this approach with reference to the quality assessment adherence criteria for the AA1000 Principle of Materiality.

In FY19 we renewed our material matters which are identified below. As a result of this process several new material matters have become important to Landcom in this reporting period and these are discussed within this report, including our intention to adopt new management approaches in FY20 where necessary.



Material issue	What this means for Landcom	Addressed within report
Climate Change and Resilience	Manage our physical and transition risks to climate change across our communities and for our organisation.	Climate Resilient Places Accountable & Collaborative Places
Low Carbon and Renewable Energy	To future proof our communities and business by adopting energy efficient and low carbon economy principles, focused on reduced energy demand and increased renewable energy production.	Climate Resilient Places
Human Rights	To drive positive outcomes for our organisation, communities and stakeholders aligned to universal principles of human rights, emerging issues, diversity and inclusion.	Healthy & Inclusive Places Accountable & Collaborative Places United Nations Global Compact - Report on Progress
Community Wellbeing and Cohesion	To create positive, cohesive and resilient communities that enable connection, mental and physical health, inclusion and safety.	Climate Resilient Places Healthy & Inclusive Places
Diverse and Accessible Housing and Communities	To enable diverse and affordable housing outcomes that support the needs of our customers and reduce the cost of living for members of our communities.	Healthy & Inclusive Places Climate Resilient Places
Natural Capital Protection and Management	To conserve and enhance our green and blue infrastructure, preserve natural resources wherever possible, and actively seek to reduce our impact on the natural environment.	Climate Resilient Places Accountable & Collaborative Places
Stakeholder and Community Engagement and Satisfaction	To collaborate, listen and involve stakeholders in creating a shared vision that is valued by those who interact in our communities.	Healthy & Inclusive Places
Accessibility, Transport and Movement	To design and deliver our communities so they are connected by active and public transport options, and innovate to reduce private vehicle use.	Accountable & Collaborative Places
Respecting Indigenous Culture and Heritage	To respect and acknowledge First Nations by considering the heritage and history of the land in and around our developments, and collaborate with indigenous communities for meaningful outcomes.	Accountable & Collaborative Places
Supply Chain Engagement	To engage, partner and innovate with our supply chain for shared value outcomes.	Accountable & Collaborative Places
Local Economic Prosperity	To ensure local communities prosper and enable jobs, training, education and employment opportunities through our operations.	Productive Places

About This Report continued

Reporting Boundaries

Our Sustainable Places Strategy applies to all new masterplan activity and projects during FY19. As a masterplan developer we use a variety of structures to deliver projects. The key types of project structures that we use are:

- Owner/Master Developer
- Project Delivery Agreement (PDA)
- Reverse Project Delivery Agreement (RPDA)
- Joint Ventures (JV).

Because we use these different approaches Landcom has varying levels of influence over project outcomes. For example, with our Climate Resilient Places targets there is variability between what we can influence when acting as the Owner/Master Developer, compared to a Reverse Project Delivery Agreement where we are not the land owner and we may need to negotiate with other project partners before adopting environmental commitments for the project.

Type of project structure	Land ownership	Delivery method	Asset disposal
Owner/Master Developer	We own the land	We are responsible for masterplanning and approvals and undertaking all development works.	We sell the land as vacant lots – residential, commercial or industrial.
Project Delivery Agreement (PDA)	We own the land	We tender for a partner to project manage and undertake development works (there is a clear delineation of risks and responsibilities between us and our partners).	The successful tenderer acts as a ‘super contractor’ in return for payment from us on sale of individual lots to third parties.
Reverse Project Delivery Agreement (RPDA)	We do not own the land (we develop the land on behalf of another government agency or the private sector land owner)	We generally undertake the planning, construction and/or sales activities.	All revenue on sale is paid to the land owner and we invoice the land owner for the reimbursement of costs and fees.
Joint Venture (JV)	We sell the land to the JV for a cash payment	We create a separate legal entity that can pay invoices, pay and receive GST and receive sales revenue.	We, and the JV partner, contribute equity into the JV equally and receive a profit share equally (not revenue).

The table below summarises which projects are in scope to be reported on for FY19 and these are mapped against each pillar of our Sustainable Places Strategy. All projects are within the state of NSW, Australia.

In some cases a project is in scope for Climate Resilient Places targets, but not for Healthy & Inclusive Places. This is because our environmental work tends to occur earlier in a project's lifecycle, linked largely to construction phases, whereas social sustainability can occur through to completion.

Table key

- Y** Refers to projects that are in scope to be reported against for one or more of the targets under the Sustainable Places Strategy.
- N** Refers to where projects are out of scope for all of the targets under a Strategy pillar.
- L** Refers to 'legacy projects'. Legacy projects are those in our portfolio that were substantially delivered prior to the Sustainable Places Strategy being adopted, and are out of scope for reporting, but have been included as part of baseline figures in some indicators.





= Climate Resilient Places

= Healthy & Inclusive Places

= Productive Places

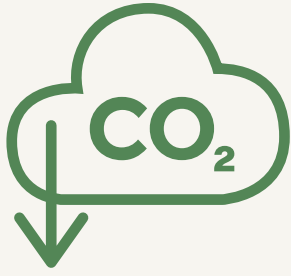
= Accountable & Collaborative Places

Division	Asset					Project overview
Corporate	Operations	N	N	Y	Y	Landcom maintains its head office tenancy at Parramatta.
Construction Unit	Dwellings and public buildings	Y	N	N	N	Construction of social housing on behalf of Land and Housing Corporation at various sites.
West	Edmondson Park	Y	Y	Y	N	Owner/Master Developer. Approximately 4,000 new homes, with train station, town centre with retail, business and commercial space, 150ha regional park with cycleways, and two new schools.
	Thornton	N	Y	Y	N	Originally a Department of Defence site. Landcom works are complete, and enabled approximately 2,000 homes adjacent to Penrith train station. Mix of detached and attached dwellings, Affordable Housing and apartments. Origin of the 21st Century Terrace.
	Riverstone	N	N	N	N	Project is a RPDA consisting of approximately 1,600 residential lots that were subdivided in 1881, and are currently owned by over 320 landowner groups. Landcom is coordinating the delivery of the project on behalf of the land owners as the authority under the Environmental Planning and Assessment Act (Paper Subdivision) Regulation 2013. The project was in the planning stage through the reporting year with works commenced in FY19.
	Wentworth Point	N	Y	N	N	RPDA with Roads and Maritime Services to deliver public open space.

Division	Asset					Project overview
South West	Macarthur Heights	L	Y	Y	N	RPDA with Western Sydney University, adjacent to the Western Sydney University campus. Located within walking distance from Macarthur Train Station and Macarthur Square shopping centre, with over 950 residential lots. Includes 42ha of parklands plus sporting fields.
	Macarthur Gardens North	N	Y	Y	N	Owner/Master Developer. Adjacent to the Macarthur Heights community, the project has a direct connection to Macarthur Train Station through Bow Bowling Creek. This site is in the planning phase.
	Renwick	L	Y	Y	N	RPDA with Family and Community Services. Renwick is a 117ha masterplanned community, located about 2.5km north of Mittagong in the Southern Highlands. It has potential to yield around 600 residential lots, ranging in size from 300m ² 'cottage lots' to 4,000m ² 'acre lots'. During the reporting period, the project completed civil works for the final stages of the development.
	Oran Park	L	Y	Y	N	RPDA with Greenfields Development Company. Once complete the precinct will provide 6,500 homes, a town center, new schools, a smart work hub, retirement village and integrated primary care center.
	Airds (Newbrook)	L	N	Y	N	RPDA with NSW Land and Housing Corporation. Long term rejuvenation of the Airds Bradbury public housing area, transforming the existing 1,500 lot public housing estate into a masterplanned community of approximately 2,100 homes.
	Bonnyrigg (Newleaf)	L	N	Y	N	RPDA with NSW Land and Housing Corporation. Long term rejuvenation of the Airds Bradbury public housing area, transforming the existing 1,500 lot public housing estate into a masterplanned community of approximately 2,100 homes.
	Claymore (Hillcroft)	L	N	Y	N	RPDA with NSW Land and Housing Corporation to revitalize approximately 1,150 homes at Claymore public housing estate. When complete, Hillcroft will include new housing, parks, playgrounds and community facilities.

Division	Asset					Project overview
North West	Lachlan's Line ¹	L	N	Y	N	Owner/Master Developer of an inner urban high-density community adjacent to the North Ryde train station.
	Sydney Metro North West Places	Y	Y	Y	N	RPDA with Sydney Metro covering Tallawong, Kellyville, Bella Vista, Norwest, Showground, Castle Hill, Cherrybrook and Epping stations. Each site is located along the metro line. While Sydney Metro delivers the infrastructure and new stations, Landcom will deliver the communities surrounding each station.
Green Square	Green Square Town Centre	L	Y	Y	N	PDA with Mirvac to provide high density, inner urban living within the City of Sydney Local Government Area.
Completed Projects	Spring Farm	N	Y	N	N	Completed masterplanned community.
	The Ponds	N	N	N	N	Completed masterplanned community.

¹ While Lachlan's Line is a legacy project and has not undergone any masterplanning during the reporting year we are considering it in-scope as we will be able to influence the sustainability outcomes in line with the new Sustainable Place Strategy through the development of the remaining stages.



Climate Resilient Places

Leadership Goal

Objective

To deliver low carbon, resource efficient and environmentally sensitive places.

Goal

To lead environmental performance across Landcom developments by committing to being carbon neutral and water positive, with zero waste and net positive ecological outcomes by 2028.

Relevant Sustainable Development Goals



Climate Resilient Places Pillar Overview

Landcom's Climate Resilient Places pillar is focused on a leadership goal to *'enable carbon neutral, water positive, zero waste and net positive ecological outcomes by 2028'*.

This leadership goal was developed to reflect Landcom's contribution towards the Paris Agreement's² long-term goal of keeping the increase in global average temperature well below 2°C, the United Nations Sustainable Development Goals³, and reducing the impact of shocks and stresses to communities and infrastructure as identified by Resilient Sydney⁴ (part of the Rockefeller Foundation 100 Resilient Cities Program), such as extreme weather and water crises.

Under this pillar Landcom focusses on environmental sustainability and resilience. It encompasses environmental management and the adoption of independent third-party rating tools and certifications, engaging with our supply chain, supporting communities to reduce their operational costs of living, and developing our projects in a way that reduce impacts on the environment.

Environmentally sustainable communities are balanced in meeting the needs of the natural and urban environment. They take into account the needs of people today, and the needs of our future generations. Landcom believes that the built environment should incorporate green spaces and retain a connection to our natural habitats, for the benefit of the environment, and our communities.

Landcom addresses environmental sustainability through the following focus areas:

- Energy & Emissions
- Water
- Environmental Management
- Climate & Resilience
- Waste & Materials.

Each of these focus areas includes a suite of targets to measure our success.

Management Approach

Energy & Emissions and Water

Every Landcom project is unique and requires a bespoke approach to environmental sustainability. We use the sustainability modelling tool PRECINX⁵ to identify opportunities for performance improvement across our Energy & Emissions and Water targets.

Our approach to Energy & Emissions includes influencing the reduction of greenhouse gas (GHG) emissions (stationary and transport) at a precinct scale across our communities and influencing the onsite production of renewable energy. We approach Water in a similar way, by looking at the reduction of potable water use across a precinct and identifying opportunities for recycling and reuse.

We also set ourselves targets for maximum stormwater discharge pollutant loads from our sites. This minimises downstream water quality impacts in the communities we develop. Urban stormwater modelling software such as MUSIC⁶ is used to measure pollutant loads across our projects.

To see our FY19 performance for *Energy & Emissions*, see [Energy & Emissions Performance Results](#) (p. 18), and for *Water* see [Water Performance Results](#) (p. 25).

2 What is the Paris Agreement? (2018) <https://unfccc.int/process-and-meetings/the-paris-agreement/what-is-the-paris-agreement>
3 United Nations Sustainable Development Goals (2018) <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> for our full alignment to the SDGs see [Appendix B: Sustainable Development Goals Alignment](#)
4 Resilient Sydney, Preliminary Resilience Assessment (2016) <https://www.100resilientcities.org/cities/sydney/>
5 Landcom commissioned the development of PRECINX in 2009 as an accurate predictive modelling tool of greenhouse gas emissions, water consumption, transport outcomes and cost of living impacts of development in the built environment. Landcom now licenses the tool, as do many other developers, utilities, and local and state government organisations.
6 MUSIC Overview (2018) <https://ewater.org.au/products/music/music-overview/>

Environmental Management

Landcom is committed to adopting independent third-party rating tools and certifications or exceeding regulatory requirements. We believe it is important to have independent verification of our sustainability performance. This is aligned to our targets for *Environmental Management*. Our preferred rating tools are outlined below.⁷

Asset type	Rating tool	Rating tool provider
Communities at the precinct scale	Green Star Communities	Green Building Council of Australia
Buildings other than residential	Green Star Design & As-Built	Green Building Council of Australia
	NABERS	NSW Office of Environment and Heritage
Residential dwellings	BASIX	NSW Department of Planning, Industry and Environment

For our FY19 activities related to Environmental Management, see [Environmental Management Performance Results](#) (p. 21).

Climate & Resilience

Landcom's approach to *Climate & Resilience* includes understanding our physical and transition risks to climate change and its impacts, ensuring our communities are adaptable to change, addressing known risks such as urban heat island⁸, and maintaining our commitment to enhancing local biodiversity and ecology.

During FY18 Landcom built its internal capacity for assessing asset exposure to physical climate change risks. This included adopting a risk assessment framework, Resilience-In-Design checklist, prompting project teams to consider common climate risks during the early phases of a project's design, and completing community resilience plans⁹ designed to enhance the resilience of our communities in the way they live day to day.

In FY19 we expanded our remit and sought to better understand our physical and transition risks to climate change. A gap analysis aligned with the Task Force on Climate Related Financial Disclosures and 2019 Global Real Estate Sustainable Development Resilience Module was undertaken to determine Landcom's current level of preparedness for the transition risks of climate change, and how Landcom currently addresses physical risks at its assets. This included business wide stakeholder engagement and a review of Landcom's systems and processes. The results found that Landcom is comprehensively addressing the physical risks to assets, and there is opportunity to enhance our preparedness to transition risks. Closing this gap will be a focus in FY20 and will subsequently be embedded as part of our ongoing management approach.

We are already taking steps to address known physical risks immediately, which includes reducing the effects of urban heat island across our new communities. As one of Sydney's most significant climate related risks, early design interventions to address urban heat are required in the creation of new communities. Landcom has also been an ongoing partner of the Cooperative Research Centre for Low Carbon Living (CRCLCL)¹⁰ — and actively engaged in the development of its urban heat island mitigation decision support tool.¹¹

7 In some instances Landcom may also agree to use other rating tools in lieu of, or in addition to, those outlined. This is at Landcom's discretion.

8 Urban Heat Island Effect (2018) <http://www.cityofsydney.nsw.gov.au/vision/towards-2030/sustainability/carbon-reduction/urban-heat-island>

9 Eligible assets include those that have been assessed for climate change risks

10 The CRCLCL came the end of its funding period in 2019.

11 Urban Heat Island Mitigation Decision Support Tool (2018) <http://www.lowcarbonlivingcrc.com.au/research/program-2-low-carbon-precincts/rp2023-microclimate-and-urban-heat-island-mitigation>



Finally, Landcom seeks to address resilience in the natural environment. This is achieved when we maintain strong diversity of our ecological systems. We abide by legislative requirements including the Commonwealth Environmental Protection and Biodiversity Conservation Act, and the NSW Biodiversity Conservation Act when addressing areas of biodiversity. When we purchase biodiversity offsets for our development approvals, we use the NSW State Government BioBanking Scheme which commits land owners to enhancing and protecting the biodiversity values of their land. We use our Biodiversity Calculator to measure the quality and quantity of ecological communities beyond any legislative requirements, pre- and post-development. We aim for a net positive outcome at the completion of our projects.

For our FY19 performance against our *Climate & Resilience* targets, see [Climate & Resilience Performance Results](#) (p. 14).

Waste & Materials

Landcom's environmental leadership goal for 2028 includes enabling zero waste communities. To do this we are advocating for responsible use of resources, and diversion from landfill. Landcom has long held a waste diversion from landfill target, which has been maintained in our new Sustainable Places Strategy.

While we are focused on reducing waste within our own offices, it is construction waste that is material to Landcom's operations. As part of our ongoing commitment to reduce waste and increase responsible materials use, Landcom continues to engage with our site superintendents and principal contractors to reduce, reuse or divert waste from landfill.

We also include the responsible sourcing of timber for all construction works within our approach. This increases engagement with our supply chain, and supports our work underway within our *Accountable & Collaborative Places* pillar.

For our FY19 performance results against our *Waste & Materials* targets, see [Waste & Materials Performance Results](#) (p. 24).

Our Future Priorities

Our Sustainable Places Strategy identifies a number of initiatives as future opportunities to enhance our Environmental Management, Climate & Resilience, and Waste & Materials focus areas. These include:

- understanding Landcom's role for improving air quality within our communities
- determine the value of adopting a Landcom materials Red List
- establishing how life cycle assessments may improve our supply chain and reduce embodied carbon within our projects.

In FY19 we progressed investigations into how Landcom has positively influence air quality within the areas we operate. As part of our FY19 materiality review, air quality also became material for Landcom as part of Natural Capital Protection & Management.

We are also supporting a research project at the Centre for Smart Modern Construction to develop methodologies for estimating embodied carbon construction supply chains. We see a future for tools such as this which will help us to track actual embodied carbon through the delivery of our community infrastructure and civil works.

In FY20 we will update our management approach to capture and address air quality, and report on progress of this research.

Climate & Resilience Performance Results

Landcom's Sustainable Places Strategy addresses *Climate & Resilience*. This focus area forms part of our Climate Resilient Places pillar and is a representation of our commitment to delivering resilient communities that balance ecological outcomes, reduce climate related stresses and build community resilience.

FY19 Targets and Performance

The below table outlines our FY19 performance against our Climate & Resilience targets.

Indicator	Objective	Target	FY18 performance	FY19 performance
Climate & Resilience	To respect, conserve and regenerate our natural environment and embed adaptation and resilience into all precincts, and expand community awareness.	All new projects to undertake a Climate Resilience Assessment.	5 out of 9 complete	7 out of 9 complete
		All new projects prepare and implement an effective Climate Adaptation and Community Resilience Plan.	2 out of 9 complete	7 out of 9 complete
		All new projects enhance the local habitat, biodiversity or ecological communities, compared to the site conditions pre-acquisition or pre-masterplan (Landcom Biodiversity Calculator).	67% make a positive contribution	67% make a positive contribution
		Total project site area in plan view comprised of building or landscape elements that reduce the impact of urban heat island effect.	100% of projects in scope	100% of projects in scope
		Greenfield Projects: 50% project site area		
		Renewal or High Density Projects: 20-50% project site area (calculation in accordance with Green Star Communities)		

Climate Change Risk and Community Resilience

In FY19 Landcom continued to collaborate with consulting firm AECOM to enhance our current project portfolio's resilience to climate related risks, and increase our internal capacity to ensure all future projects are resilient.

We complete climate change resilience assessments for priority and new projects. We use a consistent pro forma to assess Landcom projects, which was developed in 2018 in line with Intergovernmental Panel on Climate Change Fifth Assessment Report (IPCC AR5) climate projections for 2030 and 2090.¹² We also use our Resilience-in-Design checklist to guide informed decision making for projects during the concept design of a development.

Seven of nine new projects, and all relevant legacy projects, now have climate risk assessments in alignment with the IPCC AR5 climate projections, and adaptation plans developed to reduce the

physical risks of climate change to the asset and communities. The Sydney Metro North West Places (SMNW) program precincts of Kellyville and Bella Vista were new assessments during the reporting period.

Extreme heat was rated as an 'extreme risk' at all Landcom sites assessed, which is consistent with the top risks to Sydney identified by Resilient Sydney.¹³ This finding confirms the importance of Landcom's priority to reduce or mitigate the effects of urban heat island and build community resilience to heat at all new projects.

For FY20 we have embedded the requirement for climate change and community resilience assessment and planning to be undertaken by the successful proponents in the sale of Norwest (SMNW Places). The Cherrybrook (SMNW Places) site planning will recommence in FY20, which will allow us to close out the assessments and plans for our current new projects.

¹² What is the IPCC AR5 Assessment Report? <https://www.ipcc.ch/report/ar5/>

¹³ City of Sydney Resilient Sydney (2018) <http://www.cityofsydney.nsw.gov.au/vision/towards-2030/resilient-sydney>

Urban Heat Island Reduction

Heat continues to be a major stress for many cities across Australia, as confirmed by our climate change risk assessments. Landcom's commitment to reduce urban heat island effect (UHI) will contribute to reduced risk of extreme heat at our projects. This will enhance the resilience of our communities and the residents who live there.

Landcom had no new projects in scope for this target in FY19, however all new project sites are forecast to achieve our UHI targets.

Biodiversity

FY19 is the second year Landcom will report the contribution we make to biodiversity and ecological systems. To support the business in measuring this, in 2018 we developed our Biodiversity Calculator based on the Green Building Council of Australia's change in ecological value calculator provided in Green Star tools.

Landcom's Biodiversity Calculator is designed to measure the change in quality and quantity of biodiversity at a given project site, from pre-development to post development. The calculator goes beyond just assessing high-value and significant biodiversity (which legislation requires to be conserved) and factors a broader spectrum of biodiversity value into the assessment. Depending on the level of quality and quantity change, the calculator determines whether a net positive or net negative impact has been achieved. It is possible to have a net positive outcome in biodiversity, despite a reduction in physical area – if the quality of that area has been significantly improved.

The scale provided by the calculator is as follows:

Definition	% change in biodiversity index of site from pre- to post-development
Poor	<0 %
Moderate	0-10%
Good	10-50%
Excellent	>50%

We acknowledge that land development and retention of biodiversity are sometimes at odds. Despite our best efforts to retain existing flora and fauna at all our sites, sometimes this is not possible. However, we do aim to always have a net positive outcome at our projects. Some methods we may use include biodiversity offsets¹⁴, and restoration works such as improving eroded riparian corridors to full health.

For projects in scope for FY19 reporting (SMNW Places¹⁵, Macarthur Gardens North and Edmondson Park), 67% are currently making a net positive biodiversity contribution. Once complete Kellyville, Bella Vista, Edmondson Park and Macarthur Gardens North will all reduce the overall area of onsite biodiversity from pre-development to post-development, but return net positive outcomes due to the preservation of significant habitat of good quality. At each of these projects native habitat offsets will be employed to manage the reduction in habitat area. Overall 23.75ha of biodiversity will be protected and restored by National Parks, local councils or other entities aligned with legislative guidelines.

The remaining sites assessed form part of the SMNW Places program. Each of these sites is co-located with a metro station being delivered by Transport for NSW (TFNSW). TFNSW is also the land owner of these projects, and Landcom has been appointed as the master developer for the surrounding communities.

Of the SMNW Places sites assessed, Kellyville and Bella Vista are forecast to contribute a very good (net positive) change in biodiversity value, whereas Tallawong and Showground are forecast to have a poor (net negative) change in biodiversity. As Landcom is not the land owner of the SMNW Places sites, management of biodiversity offsets and other approvals is beyond our operational control, and is undertaken by TFNSW. Landcom will continue to review opportunities to elevate the performance of SMNW Places sites through project divestment and delivery strategies.

¹⁴ Through schemes such as the NSW Office of Environment and Heritage [Biodiversity Offset Scheme](#) and [BioBanking Trust](#).

¹⁵ Tallawong, Kellyville, Bella Vista and Showground

Case Study: Urban Heat Mitigation Tool

The Urban Heat Island Mitigation Decision Support tool (UHI-DS Tool) is a research project led by the University of New South Wales through the Cooperative Research Centre for Low Carbon Living (CRCLCL). Landcom is involved in the collaborative research as a member of the project steering committee, and has also made our projects available as test beds for the practical application of the research. The research objectives are:

- to provide governments and built environment industries with a decision-support tool to inform urban policy, development assessment and planning practices related to potential building and urban interventions, used to cool streetscapes and cities, decrease energy consumption, protect the population's vulnerable health-wise, and improve conditions of comfort
- to integrate scientific models with a range of mitigation techniques to perform urban heat island mitigation analysis across both building and urban scales, such as building coatings and roofs, urban form and density, greenery and infrastructure
- to develop an Urban Heat Island Mitigation Performance Index to support governments in establishing performance targets for their planning control. The Index will indicate impact on street level temperature, health and mortality and precinct level energy consumption.¹⁶

The output from the project is critical to Landcom as it has provided a tool enabling us to model and predict the urban heat impacts in our masterplans and adapt designs to minimise the impacts. Urban heat is a key driver of climate and community resilience through its effect on energy efficiency

and greenhouse gas emissions, stress on people and morbidity rates, liveability through walkability and many other facets of what makes a community sustainable.

During FY19 we completed testing the tool at Green Square Town Centre and Macarthur Heights – two very different geographic areas (inner Sydney and greater Sydney) with distinct microclimates and building types, and differing levels of natural environment surrounding the sites. The testing included site scanning with the 'Energy Bus' and a special drone fitted with sensors and cameras.

Results from the testing clearly show the dramatic benefits of using reflective surfaces and exposing foliage such as grass and trees. At Macarthur Heights the difference in roof surface temperature between a light grey and white roof is almost 10°C. The surface temperature of darker roofs at the hottest part of the day can be up to double the temperature of a white roof, as can be seen in the bottom images of Figure 1.

With a model that can predict the surface and air temperatures, Landcom will be able to reflect any environmental improvements realised through direct design interventions within the PRECINX models established for our projects. This means we could predict the reductions in energy usage (and GHG emissions) and cost of living improvements associated with energy use, and plan for improved walkability by knowing where the 'cool routes' are within a community.

The UHI-DS Tool research project came to a conclusion in FY19. Moving forward we will also review opportunities to incorporate the UHI-DS Tool in our suite of sustainable masterplanning tools.

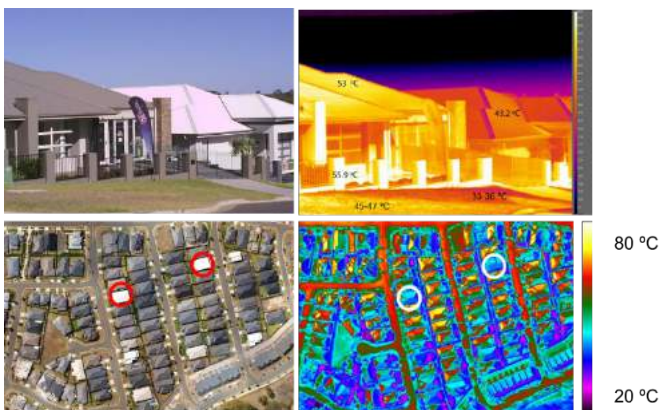


Figure 1 Results showing temperature gradient between different surface types at Macarthur Heights.

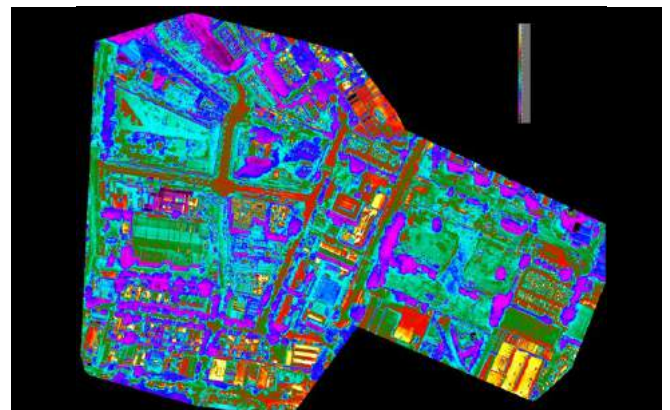


Figure 2 Surface temperature of Green Square Town Centre, data collected by drone and stitched together to create a full map.

16 RP2023: Microclimate and Urban Heat Island Mitigation Decision-Support Tool (2018) <http://www.lowcarbonlivingcrc.com.au/research/program-2-low-carbon-precincts/rp2023-microclimate-and-urban-heat-island-mitigation>



Case Study: Cooling the Commons

The effects of urban heat island can adversely affect liveability, community health and wellbeing. As an extension to our collaboration on the UHI-DS Tool, we have continued to explore ways to improve the liveability of heat impacted communities through research into cooling common spaces in densifying urban environments. The project is called 'Cooling the Commons'.

This research was part of Landcom's Roundtable, and is a collaboration between Western Sydney University, the University of Technology Sydney and Landcom. It analysed international examples of urban cooling interventions such as design and planning patterns, and the post-occupancy lived experiences of these places.

The research focused on the common urban spaces, such as plazas, walking paths or parks. It sought to establish how open space can be planned so that urban communities can feel comfortable when the city is hot. It also reviewed how uncomfortable heat can impact our use of these common spaces.

The research found that the relationship between the built and natural environment significantly impacts our use of common urban spaces. For example, wide shaded walk-ways furnished with seating and water stations that connect residential areas to public transport networks or shops positively impact social cohesion.

The practical output from the research is recommended as a pattern book or similar that can be used by planners, developers, community liaison officers, council workers and the communities they serve to assist decision-making.



The Drying Green at Green Square.

Energy & Emissions Performance Results

Landcom’s Sustainable Places Strategy addresses *Energy & Emissions*. This focus area forms part of our Climate Resilient Places pillar and is a representation of our commitment to delivering energy efficient communities that reduce greenhouse gas emissions, advance uptake in renewable energy technologies, and reduce the cost of living to residents.

FY19 Targets and Performance

Indicator	Objective	Target	FY18 performance	FY19 performance
Energy & Emissions	To conserve energy and drive energy efficient, low carbon, low emissions precincts for the future.	All new projects modelled to reduce greenhouse gas (GHG) emissions at a precinct scale (transport & stationary) by 50% against 2016 reference case (CCAP PRECINX).	Delivered: NA Forecast: 46% portfolio weighted reduction	Delivered: NA Forecast: 40% portfolio weighted reduction
		5% of predicted precinct energy demand supplied from onsite renewable energy, where site constraints permit.	Delivered: NA Forecast: 100%	Delivered: NA Forecast: 100%

Greenhouse Gas Emissions Reduction

Our emissions reduction target seeks to minimise stationary and transport emissions through the adoption of energy efficient design, renewable energy infrastructure, transport mode split and parking strategies, and uses incentives to encourage efficient building systems and appliances. The emissions reported are the predicted operational emissions of a master plan at completion and are calculated using the sustainability modelling tool PRECINX and a NSW metro average baseline of 2016. The global warming potential account factors align to the National Greenhouse and Energy Reporting (NGER) Act.

During the reporting period no new projects were sold with agreed contracts of sale to the private sector, therefore we continue to report the projected reductions for our portfolio. For completeness, we are also reporting the achievements of legacy projects underway before the adoption of the Sustainable Places Strategy.

New projects, or individual precincts within ongoing projects currently in the planning and design stages are in scope for FY19 reporting¹⁷ and now account for almost three quarters of Landcom’s overall predicted emissions (see Figure 3). New projects reported include SMNW Places (Tallawong, Showground, Kellyville precincts), Edmondson Park and Lachlan’s Line.

The weighted average GHG emission reductions expected across the new projects in scope for FY19 is 40% (see Figure 4).¹⁸ During the reporting period new precincts included in our emissions reductions calculations were predominantly high density. High

density projects have greater limitations for emissions reductions, driving a 6% shift in our performance between FY18 and FY19.

New higher density projects present Landcom with the greatest challenge to meet our targets, due to the reduced site area and roof space available to incorporate renewable energy technologies in a cost effective way. This is apparent in the responses we have been receiving to the expressions of interest for the sites we have gone to market with during the reporting period.

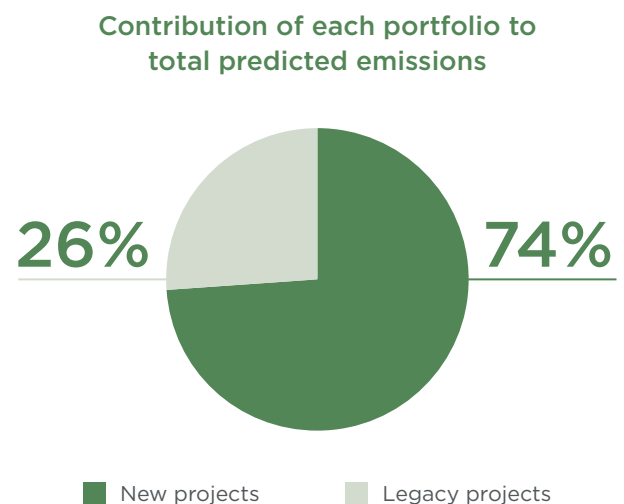


Figure 3 Contribution of each project portfolio to our total predicted emissions, showing that the quantum of emissions from our new project portfolio is more material than our legacy projects due to the proportional size of each portfolio.

¹⁷ Performance is based on projected performance for all new Landcom projects, until such time as the delivery or divestment strategy for each project is confirmed. At this time, results will become ‘actuals’.

¹⁸ Reduction from the reference case. Landcom chooses to use its PRECINX tool for modelling potable water and GHG emission reductions. 2016 reference case is defined as the normalised relevant metropolitan average applied to a masterplan.

Predicted community GHG emission reductions against 2016 Sydney Metro average

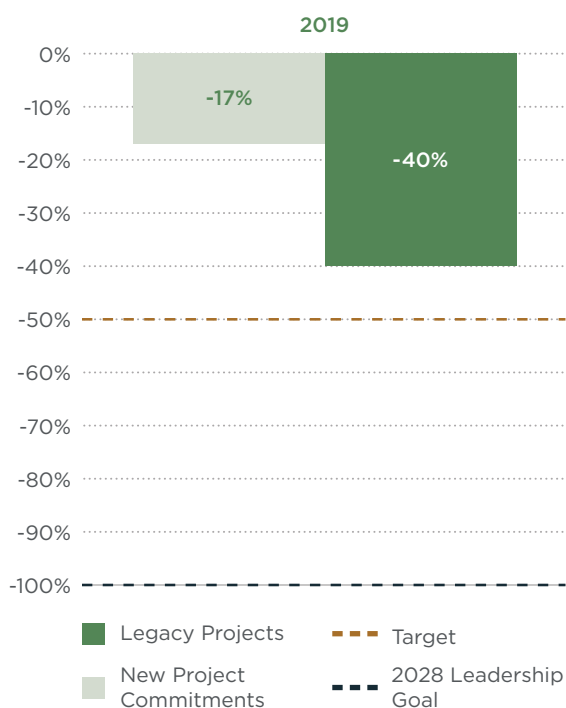


Figure 4 Predicted GHG emissions reductions from Landcom project portfolio, against FY16 baseline, modelled using PRECINX. Results show our ‘new’ projects which are in scope for reporting during FY19, and for completeness our ‘legacy’ projects, which are out of scope for reporting.

Landcom is committed to pushing for greater GHG reductions in these sites, however as we do not have operational control over the specification of the final built form we anticipate a potential for further tempered results in projects divested to third party land owners.

For fully Landcom-owned projects that will join our development pipeline, we will seek to exceed the GHG reduction targets to regain the on-balance portfolio performance for this target.

In FY19 residential dwellings continued to be our most material emissions source (see Figure 5) and are forecast to achieve a 42% reduction across new projects, while transport emissions are the second most material with a predicted reduction of 44%.

Non-residential land uses are expected to achieve an 18% reduction, which is a 10% improvement over the FY18 forecast. However this only accounts for 15% of overall emissions across our new project portfolio. In FY20 we will continue to focus on opportunities to further reduce residential and transport emissions.

While our emissions target is designed to address new projects, in FY19 we sought to make a meaningful impact at projects that have already moved through the planning and design phase. We launched Landcom’s first Sustainability Rebate at Macarthur Heights in April 2019. This is an incentive for residents building a new home. It is designed to be a market-based lever to lower emissions and improve the cost of living in established communities, while driving sales at this point in the market cycle (see our [Sustainability Rebate Case Study](#) on p. 20).

Predicted forecast emissions from each source at new projects

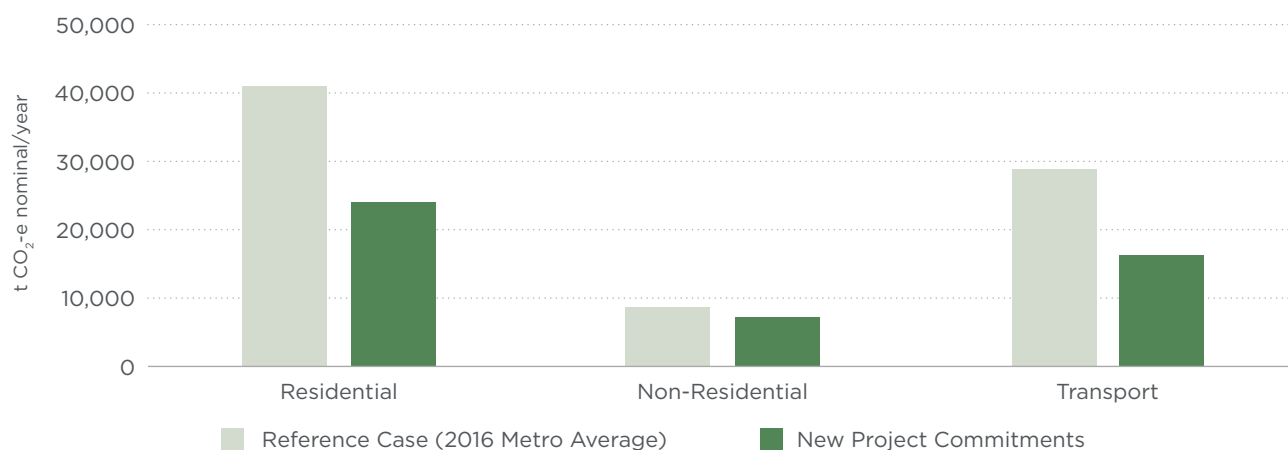


Figure 5 Prediction GHG emissions by source for new projects, compared to the FY16 reference case.

Onsite Renewable Energy

In FY19 Landcom had no projects in scope for reporting the inclusion of onsite renewable energy. This is due to no new projects having been acquired for delivery by Landcom, or sold with agreed contracts of sale to the private sector during the reporting year.

Landcom's onsite renewable energy target is for 5% of total site demand at the precinct scale to be delivered by onsite renewable energy. This extends beyond the inclusion of solar panels on residential homes, and requires a strategic precinct scale response. The intent of this target is to drive innovation and large scale integration of renewable energy sources at the project site.

Case Study: Sustainability Rebate

Toward the end of FY19 Landcom launched its first Sustainability Rebate to home buyers at Macarthur Heights. This is a new incentive to encourage greater sustainability and resilience of new homes in Landcom communities.

The Sustainability Rebate supplements Landcom's existing Landscaping and Fencing Rebate, and offers a \$15,000 incentive to buyers who build their homes to meet or exceed Landcom's standards, for example our BASIX targets.

Our Sustainability Rebate was developed in collaboration with the Landcom Sales and Marketing Team. Sales and Marketing undertook a review of the residential market to determine the best financial rebate value sufficient to attract interest and drive sales leads. The Sustainability Team then worked within the prescribed rebate value to reverse-engineer what type of home interventions would yield the greatest return on investment — both for the home owner, and to accelerate Landcom's performance against our *Energy & Emissions* and *Environmental Management* targets.

Inclusions that will contribute to a residential home meeting Landcom's BASIX targets include:

- LED lighting upgrades
- ceiling fans
- solar panels
- upgraded insulation and low-E glazing.

In developing the rebate, a key consideration was to ensure it was beneficial to new owner occupiers and renters that may choose to live in a new home within a Landcom community. Enhancing the quality and efficiency of a home improves its overall value — benefiting owner occupiers and investors. As the rebate also enables operational cost savings for the life of the home, it ensures renters derive value too.

To claim the rebate buyers must present their BASIX Certificate to Landcom showing they have met or exceeded the minimum score set by Landcom. BASIX Certificates are required by the Department of Planning, Industry and Environment and form part of existing development consent and occupancy certification requirements at the completion of a home build, so there is minimal cost impost for our customers to claim the rebate. Through this process, we are one step closer to our net-zero carbon leadership goal, encouraging low carbon homes.

The Sustainability Rebate collateral can be downloaded from the Landcom website at <https://www.landcom.com.au/assets/Downloads/macarthur-heights-/72c8300054/macarthur-heights-sustainability-rebate-flyer.pdf>



A home in Macarthur Heights.

Environmental Management Performance Results

Landcom's Sustainable Places Strategy addresses *Environmental Management*. This focus area forms part of our Climate Resilient Places pillar and is a representation of our commitment to deliver communities that achieve or exceed independent third party rating systems or standards.

FY19 Targets and Performance

Our FY19 performance results are presented below. None of our Environmental Management targets were in scope for reporting this year as no new projects were commenced or delivered to market during the reporting period.

Indicator	Objective	Target	FY18 performance	FY19 performance
Environmental Management	To maintain and enhance a culture of high environmental performance.	All projects will adopt the use of industry recognised rating tools at a masterplan and built form scale, achieving not less than 'Australian Best Practice' equivalent (Green Star preferred).	Out of scope — no projects at stage of delivering Green Star rating.	Out of scope (Legacy project Green Square awarded 6 Star Green Star Communities rating).
		NABERS: Office, Hotel & Retail - Commitment Agreement or designed-to 5 Star Energy and Water.	Out of scope — no projects delivering commercial or retail assets.	Out of scope.
		BASIX energy: Detached & Semi - 60; Low-Rise - 55; Mid-Rise - 45; High-Rise - 40 BASIX water: all dwellings - 60	Out of scope — no certificates approved with dwellings completed in the reporting period.	Out of scope — no certificates approved with dwellings completed in the reporting period.

Green Star Certification

Green Star, administered by the Green Building Council of Australia, is Landcom's preferred independent and voluntary rating tool for precincts and built form. Landcom is committed to achieving 'Australian Best Practice, 5 Star Green Star' project certifications for all new projects.¹⁹

In FY19 Green Square Town Centre was awarded a 6 Star Green Star Communities rating in 2019. Attainment of this rating was achieved collaboratively between Landcom, City of Sydney and Mirvac.

NABERS Certification

Landcom adopts the National Australian Built Environment Rating System (NABERS)²⁰ as its preferred independent and voluntary rating system to validate the operational sustainability of eligible non-residential built form. NABERS measures a building's operational energy efficiency, carbon emissions, water consumption and waste production on an annual basis, and awards a star rating out of six.

Landcom is committed to requiring a NABERS rating at new projects that include office, retail or hotel built form. A NABERS rating can only be ensured at Landcom projects through collaboration with future building owners and operators through conditional requirements within contracts of sale to future site owners.

As Landcom had no new projects released to market and sold within the reporting period, this target is not in scope for FY19.

Aligning with the NSW Government Resource Efficiency Policy (see [NSW Government Resource Efficiency Policy \(GREP\)](#), p. 52), Landcom maintains a NABERS rating for our head office tenancy in Parramatta. In FY19 we achieved a 6 Star NABERS Energy Rating representing a 'Market Leading' performance.

¹⁹ In some instances, Landcom may seek to use, or require the use of, the Green Star Design & As-Built rating tool.

²⁰ What is NABERS? (2018) <https://www.nabers.gov.au/about/what-nabers>

BASIX Certification

We measure the energy and water efficiency of homes built by Landcom in accordance with the *Environment and Planning Assessment Act Building Sustainability Index (BASIX)*.²¹ BASIX is administered by the Department of Planning, Industry and Environment (DPIE), applies to residential developments, and aims to deliver equitable, effective water and greenhouse gas emission reductions across NSW.

BASIX targets are calculated as a percentage of savings against the NSW average benchmarks (being the average per-person water consumption and greenhouse gas emissions levels across the state). These percentage savings are then expressed as a target, i.e. BASIX 50 represents a 50% saving against the benchmark. BASIX assesses a proposed dwelling based on these benchmarks, and taking into account regional variations such as soil type, climate, rainfall and evaporation rates.²²

	Dwelling Type	BASIX Reg. pre July 17	Old Landcom BASIX targets	BASIX Reg. post July 17	New Landcom BASIX targets
Energy	Detached & semi-detached	40	55	50	60
	Low rise (3 storey units)	35	No Target	45	55
	Mid-rise (4-5 storey units)	30	No Target	35	45
	High rise (6+ storey units)	20	No Target	25	40
Water	All typologies	40	40	40	60

BASIX certificates are generated in accordance with the design of a new residential development, based on the specifications of that building. A BASIX certificate must accompany any development application or complying development application before approval for that building is provided. Once construction is complete a BASIX completion receipt is issued, if an independent certifier confirms the home has been built in accordance with the BASIX specifications. Landcom uses the BASIX completion receipt to validate the percentage of homes within our portfolio designed and delivered in accordance with our targets.

In FY19 Landcom had no new projects issued with BASIX certificates since the adoption of the Sustainable Places Strategy.

For completeness we are disclosing the performance of delivered dwellings within the reporting year. These dwellings are not subject to Landcom's targets, as they were designed and issued with BASIX certificates before the adoption of our Sustainable Places Strategy.

Average BASIX Water score for legacy projects

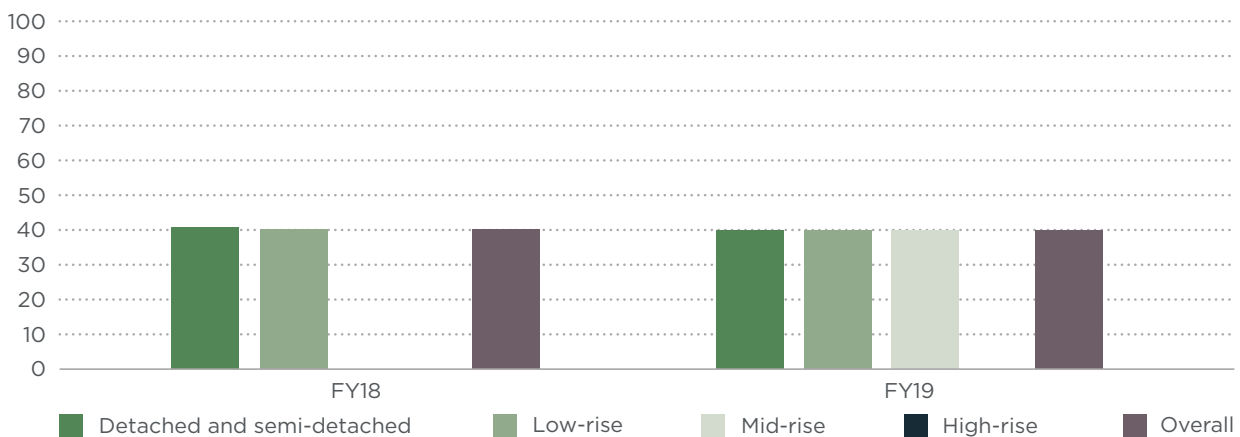


Figure 6 Trend for BASIX Water, including legacy projects, showing consistent results year on year.

²¹ What is BASIX? <https://www.planningportal.nsw.gov.au/planning-tools/basix>

²² <https://www.basix.nsw.gov.au/iframe/basix-help-notes/190-target-review/481-what-are-basix-points.html>

Average BASIX Energy performance for legacy projects

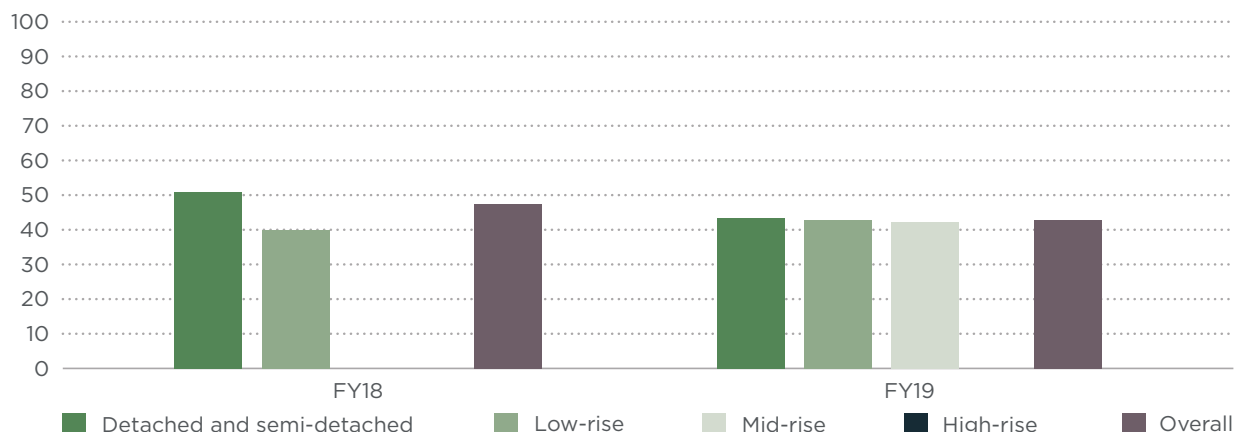


Figure 7 BASIX Energy scores of legacy projects, showing year-on-year variation in detached dwelling scores. FY18 performance is higher due to high BASIX performance of Group Homes constructed during that reporting period.

A total of 52 single-dwelling, 12 multi-dwellings and 30 units in residential flat buildings completed construction in FY19, yielding a combined weighted average²³ BASIX energy score of 43, and water score of 40.

The multi-dwelling and residential flats were all subject to Integrated Development Assessment (IDA) pathway approvals. Where an IDA is sought the masterplan and *all dwellings* are approved under the one development application. As part of the IDA process consolidated BASIX certificates were issued per project (or project stage), which averages the BASIX performance across all dwellings and typologies. Multi-dwelling BASIX requirements are lower than those for single-dwellings. Therefore, the combined average BASIX certificate is not reflective of the different standards between typologies. Thus, results can be positively or negatively weighted, depending on the make-up of that community.

Case Study: Green Square Town Centre, Green Star Communities Collaboration

In FY19 Green Square Town Centre (GSTC) was awarded a 6 Star Green Star Communities rating, representing 'World Leadership' excellence in sustainable development. This achievement was in collaboration with our development partner Mirvac and the City of Sydney.

The Green Star Communities rating sought for this project is considered ground-breaking in industry due to the unprecedented number of stakeholders that enabled a Green Star rating for GSTC, and the collaboration between them.

City of Sydney, as the certification applicant, coordinated the rating with the input of all developers in Green Square Town Centre – including Landcom.



Artist impression of the Green Square Town Centre.

²³ Weighted by occupancy.

Waste & Materials Performance Results

Landcom’s Sustainable Places Strategy addresses *Waste and Materials*. This focus area forms part of our Climate Resilient Places pillar, and is a representation of our commitment to delivering communities that reduce waste, and source materials responsibly.

These focus areas contribute to our leadership goal to enable zero waste communities by 2028.

FY19 Targets and Performance

The below table outlines our FY19 performance against our Waste & Materials Targets.

Indicator	Objective	Target	FY18 performance	FY19 performance
Waste & Materials	To drive innovation in waste reduction, and further enable the use of responsible resources.	All new projects divert minimum 95% construction waste from landfill (excluding contamination or hazardous materials).	No New Projects in scope (Legacy Projects achieved 92%)	No new projects in scope (Legacy Project achieved 93%)
		100% timber sourced for construction (by cost) is Forest Stewardship Council Certified or agreed equivalent (ie Australian Forestry Standards).	No New Projects in scope	No New Projects in Scope

Waste

Landcom continues to place a high value on transparently reporting our impact on local environments. We are advancing our approach to focus on how we can achieve net positive environmental outcomes, including zero waste communities.

In calculating our waste diversion from landfill target we exclude hazardous waste and contamination volumes from the figures to align more closely with the standards set out in the Green Star rating tools.

In FY19 Landcom had no new projects within scope for reporting against our waste diversion target. Existing Landcom projects that generated waste in FY19 reported a 93% diversion from landfill. The majority of waste was generated at Edmondson Park, Lachlan’s Line and Macarthur Heights, with fill (soil) and concrete being the most significant recycled materials. As these projects are operating under contracts that pre-date the adoption of our Sustainable Places Strategy, they are technically out of scope, however we are disclosing their waste diversion attainment in FY19 for completeness.

Consistent and accurate waste reporting remains a challenge across the development industry. In FY19 we commenced the process of moving our data collection for waste from a manual ‘paper based’ workflow, to an online portal. We will continue to deliver this new initiative in FY20 to improve consistency and accuracy in reporting.

Breakdown of waste streams diverted from landfill

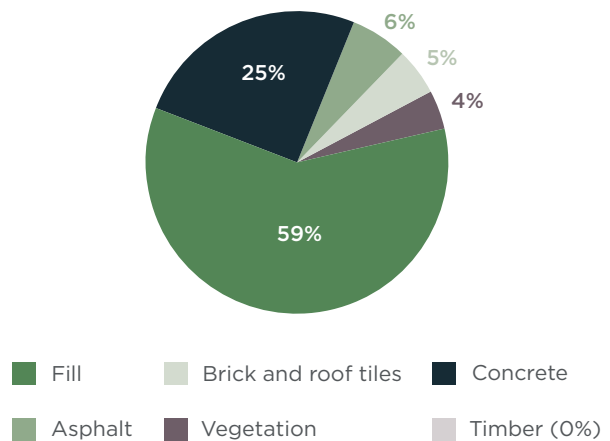


Figure 8 Breakdown of waste streams diverted from landfill in FY19.

Materials

In FY19 there were no projects in scope for reporting against our target for 100% Chain-of-Custody Certified timber, as no new projects were sold during the reporting year.

Landcom expects to report our performance against this target in FY20.

Water Performance Results

Landcom's Sustainable Places Strategy addresses *Water*. This focus area forms part of our Climate Resilient Places pillar and is a representation of our commitment to delivering communities designed for best practice water sensitive urban design which actively conserve potable water.

These focus areas contribute to our leadership goal to enable water positive communities by 2028.

FY19 Targets and Performance

The below table outlines our FY19 performance against our Water Targets.

Indicator	Objective	Target	FY18 performance	FY19 performance
Water	To design our precincts based on best practice water sensitive urban design principles, and actively conserve potable water.	Water Sensitive Urban Design strategy for all projects, pollutant discharge loads not to exceed Nitrogen 45, Phosphorus 65, Suspended Solids 85, Gross Pollutants 90.	No new projects in scope	100% in scope projects achieved
		All new projects modelled to reduce mains potable water demand by 50% at the precinct scale, against a 2016 reference case (CCAP Precinx).	49% weighted portfolio reduction	50% weighted portfolio reduction

Water Sensitive Urban Design

Landcom views Water Sensitive Urban Design (WSUD) as integral to the sustainable water cycle management of our projects. WSUD can include the rehabilitation and protection of natural waterways, design elements such as wetlands, rain gardens, water harvesting and storage and efficient fittings, and alternative water sources such as recycled or blackwater.

In FY19 SMNW Places was in scope for reporting against our WSUD target, including the Tallawong, Kellyville and Showground precincts. MUSIC modelling was undertaken for Tallawong as part of the planning approval process, which showed all stormwater pollution categories met Landcom targets. Both gross pollutants and suspended solids reductions exceeded our targets (SS87, P65, N45, GP100). Kellyville and Showground have been through Expression of Interest processes during the reporting period, with all proponent submissions received accepting Landcom's prescribed WSUD targets, and are therefore forecast to meet the target.

Potable Water Reduction

Our potable water reduction target seeks to reduce the use of unnecessary potable water and improve the efficiency of potable water that is used. The potable water consumption reported

is the predicted operational consumption of a community at completion and is calculated using the sustainability modelling tool PRECINX.

New projects, and individual precincts within ongoing projects currently in the planning and design stages, are in scope for FY19 reporting.²⁴ These projects account for 76% of Landcom's predicted overall consumption (see Figure 9) and include SMNW Places (Tallawong, Kellyville, Showground), Edmondson Park and Lachlan's Line.

Our weighted average potable water consumption reduction projected across new projects in scope for FY19 is 50%²⁵ (see Figure 11), which is in line with FY18. The typical strategies used to achieve the target is to maximize the water harvesting, and adopt higher efficiency appliances and fittings in built form.

In FY19 the residential component of our new project portfolio is forecast to achieve 51% potable water reduction (consistent with FY18 forecasts), and non-residential water reductions are 23%. Despite this, non-residential land uses for new projects account for only 4% of overall potable water use which means our focus remains on implementing results in the residential sector.

²⁴ Performance is based on projected performance for all new Landcom projects, until such time as the delivery or divestment strategy for each project is confirmed. At this time, results will become 'actuals'.

²⁵ Reduction from the reference case. Landcom chooses to use its PRECINX tool for modelling potable water and Greenhouse Gas emission reductions. The reference case is defined as the normalised relevant 2016 metropolitan average applied to a masterplan.

Total predicted potable water consumption

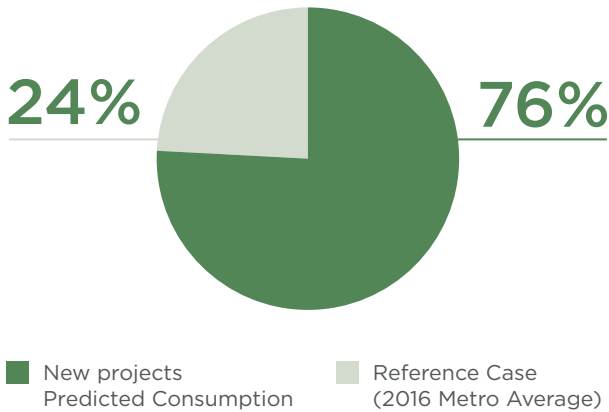


Figure 9 Comparison of legacy vs. new project predicted potable water consumption. Landcom’s new project portfolio has a more material consumption, compared to legacy projects.

New projects without access to recycled water present Landcom with the greatest challenge to meet our targets. Without access to recycled water infrastructure, potable water reductions greater than 50% at the precinct scale become technically challenging, and infrastructure such as private grey and blackwater treatment systems can ultimately have a negative impact on cost of living for residents. Despite the challenges this presents there are also opportunities for innovative design, partnership and technology solutions.

For completeness we have also presented the potable water reductions achieved by our legacy projects that are still in delivery (see Figure 11). These projects include Bonnyrigg, Claymore, Airds, Macarthur Heights and Renwick.²⁶ When calculating our performance inclusive of new and legacy projects, Landcom’s weighted portfolio achieves 47% average potable water reduction.

New project potable water consumption compared to the benchmarks

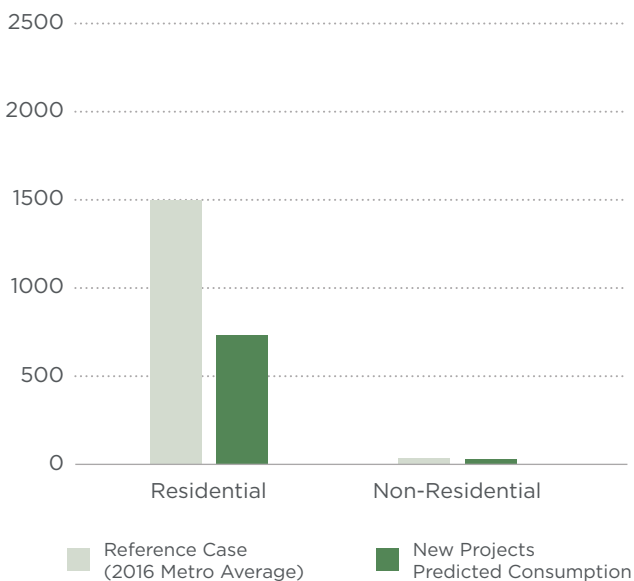


Figure 10 Predicted potable water use in committed new projects compared to the 2016 Sydney metro average benchmarks for each land use type.

Predicted community potable water reductions against 2016 Sydney Metro average

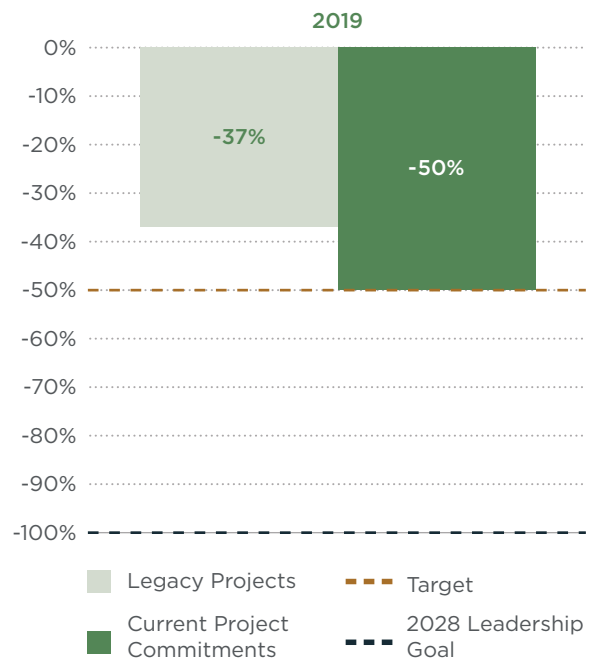


Figure 11 Potable water consumption reduction of Landcom’s project portfolio, modelled using PRECINX. Results show our ‘new’ projects which are in scope for reporting during FY19, and for completeness our ‘legacy’ projects, which are out of scope for reporting.

²⁶ The stages of legacy projects include those which are still in delivery. This is Bonnyrigg Stages 6 and 7, Claymore Stages 3 to 6, Airds Stage 6, Macarthur Heights Stages 4 and 5, and Renwick Stages 400, 500 and 700. Landcom was awarded the contract to deliver additional stages at Bonnyrigg and these stages did not present any opportunities during the reporting year to enhance the sustainability of the overall project, which has reduced the legacy project portfolio’s performance compared to FY18.



Healthy & Inclusive Places

Leadership Goal

Objective

To deliver healthy and inclusive places founded on equity for people of all ages and abilities.

Goal

To enhance Landcom's international status for delivering world class liveable places founded on equity, affordability and inclusion. Residents report overall 90% satisfaction with quality of life.

Relevant Sustainable Development Goals



Healthy & Inclusive Places Pillar Overview

Landcom's Healthy & Inclusive Places pillar is focused on a leadership goal to *'enhance Landcom's international status for delivering world class liveable places, founded on equity, affordability and inclusion by 2036'*.

This leadership goal was developed to reflect our commitment to meaningfully contribute to the United Nations Sustainable Development Goals²⁷, and reduce the impact of shocks and stresses to communities and infrastructure, such as social cohesion and affordable housing as identified by Resilient Sydney²⁸ (part of the Rockefeller Foundation 100 Resilient Cities Program).

Within this pillar Landcom focusses on how well a place delivers quality of life to its communities and the resilience of those communities. It encompasses economic prosperity and affordability, social stability and equity, accessibility, education, health and wellbeing, and integration of culture and heritage.

Liveable communities are healthy and inclusive. A well-designed community takes into account the needs of people today, and the needs of our future generations. We consider where people will work, learn, spend their leisure time and how they move from place to place. Landcom also believes that the built environment should incorporate green spaces and retain a connection to our natural habitats for the benefit of the environment and our communities.

Landcom addresses liveability through the following focus areas:

- Health, Equity & Inclusion
- Community Connection
- Housing Affordability and Diversity
- Safety & Wellbeing
- Design through Engagement.

Each of these focus areas includes a suite of targets to measure our success.

Management Approach

Health, Equity & Inclusion, Community Connection, and Safety

Landcom adopts a holistic approach to the delivery of healthy and inclusive places founded on equity for people of all ages and abilities.

For new projects we undertake social needs assessments to understand what amenities, services or programs are currently available to the immediate and surrounding community, and what gaps may need to be filled. We use this information to inform our future planning for infrastructure and community development programming.

As residents begin to live onsite we commence a continuous feedback loop via our Healthy & Inclusive Places survey (HIPs). This is an engagement tool used to gather data from residents of Landcom communities measuring satisfaction across dimensions such as design, community connection, safety, wellbeing, housing affordability and diversity based on the residents' lived experience. We have adopted performance targets across these dimensions, striving for continuous improvement to meet the quality of life expectations of current and future residents.

To benchmark Landcom's results against industry standards the survey also aligns to the Personal Wellbeing Index (PWI).²⁹ The PWI is designed to measure satisfaction with quality of life across seven domains: standard of living, health, life achievement, relationships, safety, community-connectedness and future security. Landcom uses resident satisfaction across the core elements of the PWI³⁰ to measure success against our leadership goal to *'enhance Landcom's international status for delivering world class liveable places, founded on equity, affordability and inclusion by 2036'*.

27 United Nations Sustainable Development Goals (2018) <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> to see our full alignment to the SDGs see [Appendix B: Sustainable Development Goals Alignment](#)

28 Resilient Sydney (2018) <https://www.100resilientcities.org/cities/sydney/>

29 International Wellbeing Group (2013). Personal Wellbeing Index: 5th Edition. Melbourne: Australian Centre on Quality of Life, Deakin University <http://www.acqol.com.au/instruments#measures>

30 Our management approach has been refined in FY20 to reflect resident satisfaction against the PWI core elements, rather than reporting the PWI score itself, which does not in fact represent satisfaction as our goal is stated. This adjustment in approach best reflects the intention of Landcom's long term goal. Performance results for FY18 have been restated where required in line with our refined approach.



We use the results and resident feedback from the HIPs survey each year to drive performance improvements in the way we deliver our projects. This can include adjusting our approach to the design and delivery of future stages of a project or influencing the way we deliver community development programs and services.

Based on the low FY18 performance results against our Community Connection targets we committed to undertake an evaluation of our Community Development and Welcome Program to determine past successes and areas of opportunity. The assessment found Landcom would benefit from an overarching framework to guide the way we approach and deliver community development. A shift to impact reporting would also support consistent evaluation of success and ability to communicate value creation. We are framing recommendations throughout FY20 and will adjust our management approach in our next reporting period.

For our FY19 performance results measured by our *Healthy & Inclusive Places survey*, see [Health, Equity & Inclusion, Community Connection, & Safety](#) (p. 31).

Housing Affordability & Diversity

Landcom's [Housing Diversity & Affordability Policy](#) was adopted in 2018 to drive the delivery of diverse, affordable and accessible homes. The Policy is a clear reflection of Landcom's commitment to create more affordable and sustainable communities.

Landcom defines Affordable Housing as dwellings managed or owned by a Community Housing Provider (CHP). CHPs are not-for-profit organisations that build and/or manage housing for eligible people on very low, low and moderate incomes or who are unable to access appropriate housing in the private market.

Landcom's Housing Affordability & Diversity Policy requires 5-10% of housing in our projects to be provided as Affordable Rental Housing, owned or managed by a CHP. The CHP may build the homes, and will manage eligibility and waiting lists, tenants' services and property maintenance.

We also address housing diversity and accessibility in response to Sydney's current market conditions. We aim to deliver a range of tenure options for owners and renters, improve the range of home options available in the market especially for first home buyers, and ensure people have the ability to access fit for purpose housing throughout their lifetime.

We complement this by advocating for and requiring homes that embody Universal Design principles and are Livable Housing Australia (LHA) certified.

For our FY19 performance against our Affordability & Diversity targets, see [Affordability & Diversity Performance Results](#) (p. 34).

Design through Engagement

We maintain a commitment to excellence in design and meaningful stakeholder participation from all those who have a stake in the evolution of our cities, including the people in the communities that know them best.

In FY19 Landcom established its Design Review Panel (DRP). The DRP provides advice to Landcom on strategies to achieve design excellence and quality of urban design outcomes across our project portfolio. The DRP is comprised of industry experts with experience across design and environmental consultancies, government entities and the development sector. The objectives of the DRP are to support Landcom project teams with a critical design review process, and provide access to industry experts for guidance and support.

As part of our management approach all projects are required to present to the DRP at least once per year, as they progress through the masterplan and design stages. In addition, active projects that make significant reviews to future stages must also present to the DRP. Landcom's aim is that this robust process will ensure enhanced design outcomes for the communities we deliver.

Landcom's Join In Framework guides our approach to stakeholder engagement. The framework aligns with the International Association for Public Participation (IAP2) principles. IAP2 'seeks to promote and improve the practice of public participation or community and stakeholder engagement, incorporating individuals, governments, institutions and other entities that affect the public interest throughout the world'.³¹

³¹ International Association for Public Participation Australasia (2018) <https://www.iap2.org.au/Home>

Engagement principles

Our approach to engaging stakeholders is underpinned by the following principles, which are widely accepted and promoted by engagement advocates in Australia and around the world. We recognise that there's some overlap of ideas related to each principle and that's okay because the principles are interdependent.



Collaborative

Working with stakeholders with an interest in delivering positive project outcomes



Purposeful

Planning and resourcing engagement to support project delivery



Proactive

Engaging stakeholders early and throughout project planning and delivery and making it easy for them to participate



Accountable

Being clear about the purpose of engagement, level of influence and how the influence has shaped recommendations and decisions



Inclusive

Engaging stakeholders with different needs and interests

For our FY19 performance against our Design through Engagement targets, see [Design through Engagement Performance Results](#) (p. 36).

Our Future Priorities

Our Sustainable Places Strategy identifies a number of initiatives as future opportunities to enhance our Health, Equity & Inclusion and Community Connection focus areas. This includes:

- exploring opportunities to positively influence diversity, inclusion and accessibility
- exploring opportunities to advance innovation in education, health and wellbeing infrastructure
- developing a corporate health and wellbeing approach
- piloting diverse housing projects to demonstrate innovation
- identifying mode-shift opportunities to reduce car dependency in appropriate locations.

As part of our FY19 materiality review, diversity, inclusion, health and wellbeing became material matters for Landcom as part of Human Rights and Community Wellbeing & Cohesion.

We have already made progress by adopting a Diversity & Inclusion Policy with associated measures and targets, and established a staff-led Diversity & Inclusion Working Group that meets monthly to drive positive outcomes for the business. In FY19 we also launched LifeStreet as our preferred Employee Assistance Program focused on whole of life support to the individual.

In FY20 we will be updating our management approach to capture and address these matters more strategically.



Health, Equity & Inclusion, Community Connection & Safety Performance Results

Landcom's Sustainable Places Strategy addresses *Health, Equity & Inclusion, Community Connection and Safety*. These focus areas form part of our Healthy & Inclusive Places pillar and represent our social sustainability commitments.

FY19 Targets and Performance

The below table outlines our FY19 performance against our Health Equity & Inclusion, Community Connection & Safety targets.³²

Indicator	Objective	Target	FY18 performance	FY19 performance
Health, Equity & Inclusion	To deliver healthy and inclusive places founded on equity for people of all ages and abilities.	2036 Goal: Residents report overall 90% satisfaction with quality of life.	84%	86%
		90% residents report high quality public, active and sustainable transport options to key amenities, services, public transport and employment.	80%	83%
		90% residents report high physical and mental health, reflecting project design, programs or events that encourage active, social and healthy eating lifestyles.	90%	91%
Community Connection	To nurture wellbeing and connection for all that live, work and recreate in our communities.	90% resident overall satisfaction with the integration of culture and heritage into all new projects.	55%	61%
		90% resident reported community cohesion across all new projects, by fostering the integration of community networks and facilities into our projects.	66%	66%
Safety	To drive a culture and priority of safety.	Achieve a culture of safety throughout our organisation and on all Landcom projects, striving to achieve 90% overall community safety score at our projects.	92%	93%

Health, Equity & Inclusion

In FY19 Landcom delivered its second Healthy & Inclusive Places Survey (HIPS), seeking to understand how residents of our communities perceive their quality of life. The survey was open for participation from 15 April to 17 May 2019, accessible online, via telephone survey, and in hard copy.

Participating projects represent a diversity of typologies, sizes, locations and stage of completion. A total of 495 qualifying responses³³ were received across Bunya, Caddens, Spring Farm, Green Square Town Centre, Macarthur Heights, Oran Park Town, Renwick, and Thornton.

Results reported are aggregated at the portfolio level, and weighted based on the participating projects' respective scale, and the percentage of project population that participated in the survey.

Results against our 2036 Goal for overall quality of life satisfaction have improved to 86% in FY19.³⁴ Strong results are also reported for access to transport and walkability (83%), and physical and mental health (91%).

³² FY18 results restated in line with our disclosed updated management approach.

³³ Survey data was cleaned for non-qualifying responses, as outlined in the Terms & Conditions of participation. Responses omitted from the overall results included incomplete or duplicates, and non-residents of the participating communities.

³⁴ Results for FY18 restated in line with our improved management approach.

Community Connection

Our FY19 performance results against Community Connection continue to show a year-on-year trend of lower satisfaction by residents for community cohesion (66%) and the integration of culture and heritage (61%). This is consistent with our independent review of historical community development activities showing low participation and engagement rates in general.

Examples of FY19 activities undertaken at projects with an active community development program include:

- regular walking groups
- meeting of resident social clubs
- mums and bubs groups
- celebration of events such as Mothers and Fathers Day
- regular playgroup meetings
- engagement with local schools
- community connection events such as movie nights or summer festivals.

In FY20 we will be adopting a new framework for community development which will directly target increased participation, connection and engagement with our residents.

Activities undertaken in FY19 that supported community connection and the integration of culture and heritage include:

- Tharawal (Aboriginal Land Council) participation in youth wellbeing event for Mental Health Day
- Thornton Welcome Dinner Program, including community facilitator training for nine volunteers and two resident hosted community dinners
- art, photography and poetry workshops and events across various communities.

Safety

In FY19 residents continue to report high levels of perceived safety (93%) either at home or within their community. We ask residents to rate their sense of safety from 'very unsafe' to 'very safe' in the following situations:

- at home alone during the day - 99% of residents report feeling safe or very safe
- walking alone within their community during the day - 98% of residents reporting feeling safe or very safe
- at home alone during the evening - 93% of residents report feeling safe or very safe
- walking alone within their community during the evening - 93% of residents report feeling safe or very safe.

Throughout the design process we continue to adopt best practice Crime Prevention through Environmental Design (CPTED) principles.

Case Study: Welcome Dinner Project, Thornton

The Welcome Dinner Project is a community initiative that connects people through the universal tradition of sharing food and stories.

The event helps to introduce newly arrived people (migrants, refugees, people seeking asylum and international students) and existing Australian born residents over a shared meal hosted in a community members' home.

The program, which Landcom piloted in FY19 at our Thornton community, aims to minimise social isolation and to increase connection by helping people who are either new to the community or new to Australia, realise a greater level of independence, create a routine and develop close friendships and support networks.

At Thornton the Welcome Dinner was a huge success and connected 15 members of the community. The project also trained nine Thornton facilitators/hosts to enable them to hold similar events at their home in the future. A follow up 'Story Telling' event was also run in a workshop style evaluation forum to measure the impact of program on the lives of the participants and volunteers.

"I have never heard my husband say the word grateful. He has been talking with me about his feelings tonight and he is grateful to be attending this dinner and to be meeting so many new people."

(Quote from Welcome Dinner participant)



A Welcome Dinner participant.

Case Study: Inclusive Playspaces

Creating quality public spaces that are liveable, healthy and inclusive forms part of our Healthy & Inclusive Places pillar. A key component in delivering quality open space within our communities is playspaces, as they provide a place for children and carers to connect and to be healthy and active.

Best practice playspaces apply principles of inclusive design and accessibility for people of all ages and abilities to enjoy, including carers.

Landcom was an advisory group member in the establishment of the NSW Everyone Can Play Guideline, which outlines the principles and design features for inclusive playspaces. We have begun using the Guideline to assess our existing community playspaces and identify areas for improvement.

We found that the results of our Healthy & Inclusive Places survey (HIPS) demonstrated the need for more inclusive playspaces. Of the surveyed communities, 46% of households included children and 11% have at least one person experiencing disability.

In FY20 we will combine our audit data, feedback from our HIPS survey and our ongoing application of the Everyone Can Play Guideline to ensure the future playspaces in our communities are innovative and inclusive for all.

Affordability & Diversity Performance Results

Landcom's Sustainable Places Strategy addresses *Affordability & Diversity*. This focus area forms part of our Healthy & Inclusive Places pillar and is a representation of our commitment to delivering affordable and sustainable communities.

In FY18 we released our [Housing Affordability & Diversity Policy](#) to drive the delivery of diverse, affordable and accessible homes. It's important that housing types and tenures meet local demographic diversity and affordability needs. We must also ensure the housing we deliver to market remains current and reflects the changing needs of communities and household compositions.

FY19 Targets and Performance

In FY19 our targets related to Affordable Housing and Livable Housing Certification as we had no projects in scope for reporting as no new projects were released to market or sold during the reporting period.

Indicator	Objective	Target	FY18 performance	FY19 performance
Affordability & Diversity	Deliver on Landcom's commitments for affordable, diverse and sustainable homes.	Deliver 5-10% Affordable Housing across the Landcom portfolio.	No projects in scope for reporting	No projects in scope for reporting
		20% of medium to high density dwellings within all new projects achieve Livable Housing Australia Silver Certification (or equivalent).	No projects in scope for reporting	No projects in scope for reporting
		New projects to deliver 10-15% diverse housing.	No projects in scope for reporting	No projects in scope for reporting

Affordability & Diversity

We had no projects in scope for reporting against our housing targets this year, as new precincts within our SMNW Places program did not exchange on contracts of sale within the reporting period.

Despite this, we are forecasting full achievement of our targets for all precincts within our SMNW Places program, and new projects.

In FY19 we completed a range of training, research and resource development activities to help support future housing affordability and diversity in our communities, and integrated Landcom's Housing Monitor into project business planning and reporting.

The Housing Monitor is a tool designed to collect detailed housing type information from project teams on an ongoing basis. Its use is now a key component of our annual business planning process and includes forecast future development stages — allowing Landcom to have a clear view of whether we are on track to meet our housing targets for the life of a project.

Upskilling our staff included running a Universal Housing seminar with expert speakers, and staff site visits to exemplar Affordable Housing developments. We also launched the Housing Indicators tool that provide ABS and other data of projected and current household needs compared to current housing stock. Finally we worked to familiarise teams with the Landcom Affordable Housing Prequalification Scheme, developed to facilitate partnerships with the Community Housing sector. This scheme covers all of NSW and is hosted by the Department of Finance, Services & Innovation making it available to government and the private sector to encourage delivery of Affordable Housing.

As part of our HIPS survey we also asked residents in Landcom communities to state their satisfaction with a range of affordability and diversity indicators.³⁵ Our results highlighted the following findings.³⁶

- 84% of residents felt that there was a broad range of homes of different sizes, types and prices in their area, up from 75% in FY18.
- 69% of residents would look for another home within their existing community should their needs change, up from 67% in FY18.
- 63% of residents felt there was access to reasonable quality housing to rent or buy in their area, improved from 52% satisfaction in FY18.
- 78% of survey respondents would be able to raise \$2,000 in an emergency, and for over 50% it would not materially impact their household. Of all survey respondents 22% would struggle to, or be unable to, meet this demand in an emergency. This is a reduction from our 2018 result of 38%.

Case Study: Build-to-Rent in Australia

We are always looking for ways to increase access to affordable and diverse housing for our communities. Build-to-Rent (BtR) is an emerging asset class that has proven success in the United Kingdom and United States. Led by the University of New South Wales and Macquarie University, and with contributions from University of Technology Sydney and London School of Economics, Landcom funded research (see [Research Investment p. 44](#)) to critically evaluate the potential of BtR to deliver affordable housing in the Australian market.

The research examined international case studies in the United Kingdom and United States that incorporate affordable rental opportunities and how BtR could fit within the Australian State and Federal policy and taxation environment.

The research found that current Australian housing conditions and policy settings constrain the potential of BtR to directly address housing affordability in Australia, but BtR does support increased housing diversity, an important Landcom objective, as well as providing a more secure form of private rental housing.

Current and projected cumulative housing activity

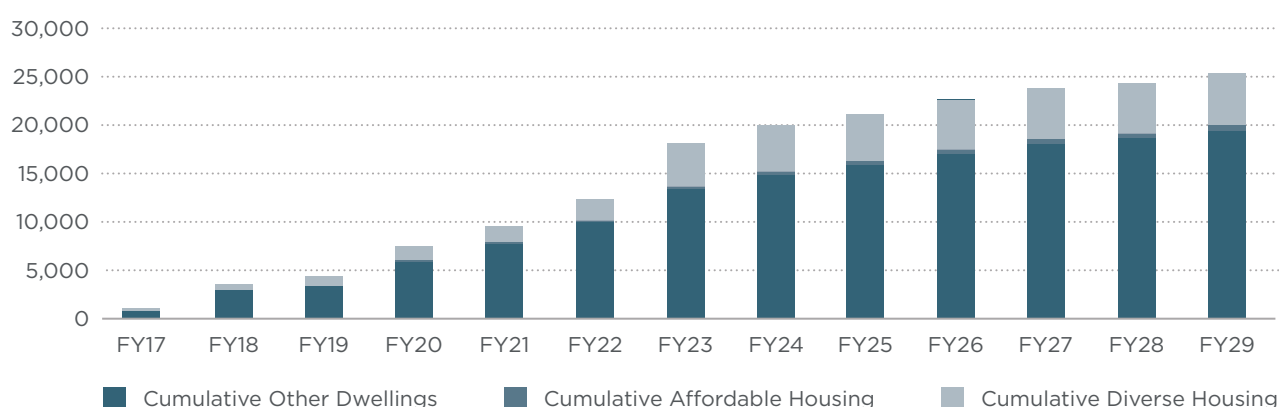


Figure 12 Forecast Housing Affordability targets attainment over 10 years based on current Landcom new projects.

35 The ability to raise \$2000 in case of an emergency is a standard Australian Bureau of Statistics method of capturing and measuring mortgage stress; 'Household Income, living standards and financial stress', Australian ABS: <http://www.abs.gov.au/Ausstats/abs@.nsf/0/793D1402EE51BA8BCA256A5D0004F5D5?Open>

36 FY18 results restated in line with our updated management approach.

Design through Engagement Performance Results

Landcom's Sustainable Places Strategy addresses *Community Engagement and Design*. These focus areas form part of our Healthy & Inclusive Places pillar and are a representation of our social sustainability commitments to excellence in design and meaningful engagement with our stakeholders.

FY19 Targets and Performance

Landcom released the Join In Framework in 2018 as part of our commitment to engagement, and established our Design Advisory Panel in 2019 to address design excellence.

Indicator	Objective	Target	FY18 performance	FY19 performance
Design through Engagement	To optimise the quality of design and place and drive strong engagement with our communities and stakeholders.	All new projects to undergo peer review through the Landcom Design Review Panel (or equivalent).	No projects in scope	100%
		All new projects to conform with the community engagement policy, Join In Framework, aligned to industry best practice for stakeholder engagement practice.	No projects in scope	100%

Community Engagement

Our approach to working with the people, groups and organisations that have an interest, that will be directly impacted, or have an ability to influence our projects is guided by our Join In stakeholder engagement framework. The framework outlines our commitment to stakeholder engagement and to continued learning and improvement in our engagement practice to help create more affordable and sustainable communities.

Throughout FY19 our focus was on embedding the Join In framework across the organisation through staff training, preparing up to date communications and engagement strategies for projects, and evaluating our engagement activities.

In FY19 twelve projects have up to date and fit for purpose communications and engagement strategies in place to reflect Join In.

SMNW Places precincts included Tallawong, Norwest, Kellyville and Bella Vista. At these precincts we are working with local councils and other agencies to plan for growth. We publish regular program updates for interested stakeholders and have provided opportunities for communities to learn about, and provide feedback on, development proposals before seeking approval from consent authorities.

In FY20 we will maintain up to date communications and engagement strategies for our projects and develop plans for new projects. We will continue to embed Join In with ongoing evaluation and staff training; with a specific focus on building our capacity for collaborative action with key stakeholders.

Lessons from engagement evaluation this year

Collaborative We can adopt a long term approach to relationships to help us to deliver projects. We can grow and sustain more effective working relationships with councils and agencies by focussing our communications on infrastructure provision and collaborating to deliver a common agenda.

Purposeful We can communicate more proactively by sharing project updates via a range of communication channels, such as our website and newsletters to keep communities better informed.

Proactive We can find opportunities to engage earlier in our development pathway, while plans are being drafted, to enable us to share our aspiration and advocate for future communities and the potential of new places to deliver benefits to both new and existing communities.

We can focus on consistently giving communities sufficient notice of opportunities to engage with us and time to reflect and provide feedback on our plans.

Accountable We can report outcomes from consultation activities in a more timely way and notify stakeholders who provide us with contact details that engagement outcomes have been reported. We can demonstrate our commitment to accurately report feedback we receive by inviting comment on outcomes reports.

Inclusive We can routinely include details for telephone interpreter services on communication materials so that community stakeholders who do not speak English as a first language can access information and engage on our projects.

Design

During FY19 all projects within our business development portfolio, or active projects undertaking masterplanning or reviewing design and delivery options, presented to the Design Review Panel (DRP). Within our active project portfolio this included Edmondson Park, Green Square, and SMNW Places.

The DRP provides expert review of projects in concept or masterplanning design, with the aim of achieving design excellence. Feedback is often provided for a project team to consider and respond to. The DRP is also kept abreast of design related policy and strategy such as progress against our Sustainable Places Strategy, Housing Affordability & Diversity targets, and key findings from our HIPs survey.

Case Study: Valuing Creative Placemaking

Placemaking plays an important role in how Landcom builds healthy and inclusive communities. Creative placemaking uses the arts to make a place more vibrant, socially engaging, and interesting by co-ordinating arts-based activities within the physical environment, such as public art projects that reflect local histories. Creative placemakers encourage the presence of arts-related businesses, or the staging of arts-related programming and cultural events or activities.

To foster a greater understanding of the value of creative placemaking and how to integrate activities into Landcom projects, we partnered with the University of Newcastle, Macquarie University, the University of NSW and City People to review existing international literature and practices as part of Landcom's Roundtable. Together we developed a toolkit designed to assist in the evaluation and understanding the impact of creative placemaking. The literature review was published in July 2018.

Preparation of the toolkit synthesised hundreds of indicators from existing tools into a set of four tools that can be used by placemakers to plan and evaluate creative placemaking activities. This included an Organiser Tool, Business Owner survey, Facilitator pre-survey, and Attendee survey.

The toolkit was tested at community events held at Green Square, Sydney, Honeysuckle, and Newcastle in 2018 and assessed to ensure alignment with the Green Star Communities rating tool.

The toolkit is designed to help the people behind creative placemaking projects capture the value of these activities and understand where they can be improved. It's intended to be easy to use, scalable depending the users' needs, and to help busy people in a wide range of organisations.

The toolkit and a user guide are available on Landcom's website.



A Landcom hosted creative placemaking event.



Productive Places

Leadership Goal

Objective

Drive the delivery of productive places, and enable jobs for the future.

Goal

To contribute to a global innovation economy by enabling 30,000 enduring jobs for the future by 2036.

Relevant Sustainable Development Goals





Productive Places Overview

Landcom's Productive Places pillar is focused on a leadership goal to *'contribute to the global innovation economy by enabling over 30,000 new jobs by 2036'*. This is our economic pillar committed to delivering places that will be productive and engaging for those that live there.

This leadership goal was developed to reflect Landcom's commitment to economic development, strengthening technology infrastructure and advancing equitable opportunities for skills development and education.

Landcom addresses the enablement of jobs and innovation through the following focus areas:

- Training & employment
- Innovation

Both of these focus areas includes a suite of targets to measure our success.

Management Approach

Training & Employment

Our leadership goal to enable 30,000 jobs across our communities by 2036 is in direct response to the broader NSW government objectives. As at 2036, the Greater Sydney Commission (GSC) forecasts the Sydney region alone will need 817,000 new jobs. We support these targets by developing productive places and mixed-use communities where people can work, live and play.

In FY18 our Economic Development Working Group³⁷ released an approach for overcoming the challenge of consistently and effectively calculating our efforts to enable enduring local jobs. We use proxy employment ratios, developed through detailed research and benchmarking, attributed to various land uses based on gross floor area. Examples of land uses included are commercial, retail, industrial, community, cultural, tourism, health services, education, storage, hotel, serviced apartment, student housing and residential. As jobs creation is a long-term goal for Landcom, we report our performance based on the FY actuals, and forecast jobs created for the life of a project.³⁸ This gives us a clear indication of whether we are on track to meet our 2036 target.

In FY19 Landcom's methodology was also adopted across the NSW Government's Common Planning Assumptions Group (CPAG), influencing a consistent government wide approach.

We also contribute to advancing education and skills development across our communities. We work with industry and registered training organisations to develop programs that address specific skills requirements of locals, and provide training opportunities and employment pathways for those experiencing low or long-term unemployment. We also collaborate with schools and other educational institutions to deliver learning and youth engagement programs that are aligned with the NSW primary and secondary curriculum topics.

For Landcom's FY19 performance for enabling jobs and providing local training and employment outcomes see [Training & Employment Performance Results](#) (p. 42).

³⁷ The Economic Development Working Group was established during our operations as Landcom trading as 'UrbanGrowth NSW'.

³⁸ In FY19 we have revised our management approach to include only new projects, or precincts within projects where Landcom has the ability to influence the outcome since the adoption of our Sustainable Places Strategy. Our FY18 results are restated and noted accordingly.

Innovation

Landcom invests in research that advances the property and development industry, and takes action to future proof our communities.

We invest in collaborative research such as Cooperative Research Centre programs, or via our own Roundtable. Landcom's Roundtable is a collaboration with other government organisations³⁹ and eight leading NSW universities. Comprised of senior representatives from each institution,

the Roundtable meets several times a year to review research proposals that advance urban development innovation.

Our Roundtable was established for an initial period of three years, which matured in FY19. As part of our commitment to continuous improvement we commissioned the Australia and New Zealand School of Government to undertake an independent evaluation of the Roundtable. The outcomes have guided Landcom to adopt research priorities for future investigation aligned to our Strategic Directions:

Governance: Landcom's Roundtable Research Program



³⁹ During FY19 government participants included Government Architect NSW, Greater Sydney Commission, Hunter & Central Coast Development Corporation and UrbanGrowth NSW Development Corporation.

Landcom Strategic Direction	Research Priority
Housing Increase the affordability, supply and diversity of housing	Landcom is interested in research that: <ul style="list-style-type: none"> clarifies how Landcom can deliver innovative housing governance or tenure models for low to moderate household incomes identifies relevant new housing design typologies that are scaleable, affordable and resilient to future market changes.
Partnerships Partner with others to unlock development opportunities and improve delivery	Landcom is interested in research that: <ul style="list-style-type: none"> empowers future project resilience to the changing nature of cities, infrastructure, employment, people and communities.
Leadership Demonstrate excellence in sustainable development and planning practices	Landcom is interested in research that: <ul style="list-style-type: none"> empowers urban developers to advance the delivery of sustainable, socially equitable, environmentally friendly and commercially viable communities enables the delivery of new home designs that meet the needs of the diverse communities in which we operate empowers the commercialisation of knowledge creation to benefit Landcom and industry.

Landcom addresses emerging technologies in our Innovation focus area. Currently we are seeking to roll out smart technology to our new communities in the form of electric vehicle (EV) rapid charge stations and increasing the provision of free Wi-Fi in public places. We see these initiatives as future-proofing communities, reducing inequalities in access to information and ensuring early adoption of future transport technologies.

Ultimately, the provision of EV chargers throughout Landcom communities improves resilience, reduces greenhouse gas emissions, and reduces transport related cost of living expenses for residents. These targets also contribute to Landcom's low-carbon transport approach, including accessibility to public transport, walkable and cycling-friendly neighbourhoods (see [Health, Equity & Inclusion](#) on p. 31).

For our FY19 activities related to Innovation see [Innovation Performance Results](#) (p. 44).

Our Future Priorities

Our Sustainable Places Strategy identifies a number of initiatives as future opportunities to enhance our Productive Places commitments. These include:

- adopting a Reconciliation Action Plan
- considering our business approach to staff volunteering
- advancing our approach to smart cities and innovation
- seeking collaborative opportunities to deliver smart working hubs and other community enablers.

In FY20 we will update our management approach to include the adoption and delivery of a Reconciliation Action Plan. This responds to our new material matter of respecting indigenous culture and heritage. We will also continue to investigate opportunities for more staff volunteering, smart cities and the delivery of collaborative work hubs.

Training & Employment Performance Results

Landcom's Sustainable Places Strategy addresses *Training & Employment*. This focus area forms part of our Productive Cities pillar and is a representation of our commitment to advancing needs-based education, skills and training to our communities.

FY19 Targets and Performance

In FY19 all targets for reporting against our Training & Employment were in scope. Our results are presented below.

Indicator	Objective	Target	FY18 performance	FY19 performance
Training & Employment	To provide opportunities for skills development, education and employment that will support our communities to thrive.	To contribute to a global innovation economy by enabling 30,000 enduring jobs for the future by 2036.	354 cumulative jobs enabled (24,881 jobs projected by 2036)	363 cumulative jobs enabled (26,734 projected by 2036)
		Projects to engage and foster education, learning or employment outcomes via actives or initiatives, based on identified needs of the local and regional community.	Engaged over 700 students across our Skills Exchange, research and excursion programs	Engaged over 1,500 students across our Skills Exchange, research and excursion programs

Enabling Enduring Jobs

Landcom is on track to meet our commitment to enable 30,000 enduring jobs by 2036.⁴⁰ FY19 in scope projects include remaining stages at Edmondson Park, Lachlan's Line and Green Square, and new precincts across SMNW Places and Macarthur Gardens North.⁴¹

There is only a minor shift in our actuals performance from FY18 to FY19, which reflects the Edmondson Park Bambi Childcare Centre delivered by our construction team during the reporting period. The greatest

uplift in jobs creation comes from our SMNW Places precincts, located on the new northwest metro line. We have also increased our future projections due to Macarthur Gardens North coming online as a project within the masterplanning phase, and refining our vision of future land uses across several SMNW Places precincts. Within the SMNW Places program, several precincts are due to exchange on sales contracts during FY20, which will drive a significant uplift in our actuals reported for FY20.

Progress towards leadership goal: enabling 30,000 enduring jobs for the future by 2036

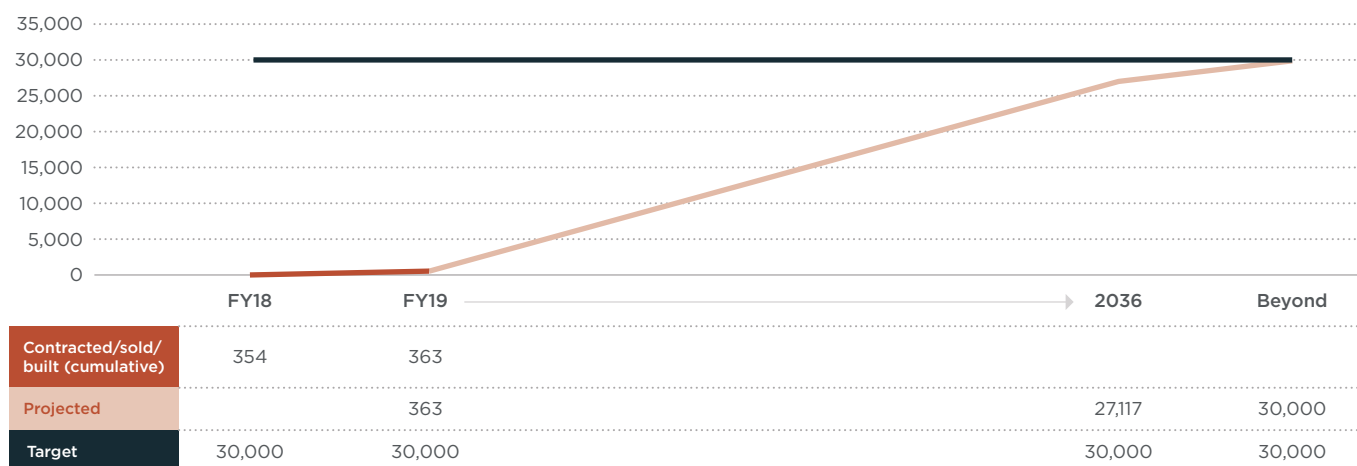


Figure 13 Progress towards achieving our commitment to enable 30,000 enduring jobs is seen to advance quickly from FY20 onwards. This is due to new projects such as those in the SMNW Places program coming online.

⁴⁰ FY18 results are restated based on our updated management approach to include only projects with precincts remaining that Landcom can directly influence outcomes.

⁴¹ Edmondson Park Stages 3, 5, 6 and 9; all Lachlan's Line stages excluding North Station and Green Square stages 2, 3 and 4.



Training & Employment

In FY19 we delivered our Skills Exchange program at Macarthur Heights, and commenced a new program at Bonnyrigg. This is an extension of our Skills Exchange investment that commenced at Airds and Claymore in FY18. These communities have an identified need for employment pathways for young people and the long-term unemployed.⁴²

At Macarthur Heights ten participants commenced the eight-week program, with a total of seven completions, and five students successfully placed in full time employment immediately after fulfilling the course requirements. Participants that completed the program obtained a Certificate II of Land and Conservation Management, and five secured a pathway into full time employment in the construction industry.

Landcom uses the Australian Social Value Bank (ASVB) Value Calculator to assess the financial impact of these programs. Total financial investment from Landcom in the program is approximately \$7,000. Based on the seven students that completed the course and five successful work placements, the projected net benefit totals just over \$162,000, representing a cost benefit ratio over 18:1. The net benefit per participant is assumed to be in excess of \$16,200.

Participants of our Bonnyrigg program will graduate in early FY20.

We also engaged over 1,500 secondary and tertiary students throughout the reporting period, as part of our Roundtable research programs, school excursion programs, events and project engagements. This ranged from guest lectures to Bachelor or Master's degree candidates by our senior leaders, through to providing students with access to our assets to learn about real world development practices.

Case Study: Collaborative Urban Teaching Platform

Universities and governments are increasingly encouraged to work collaboratively on large-scale urban development projects. Landcom fosters this engagement through research and student engagement activities under the Universities Framework Agreement. One such initiative is the Collaborative Urban Teaching Platform (CUTP) which is a multi-university, cross-disciplinary urban teaching partnership developed by Landcom and several NSW-based universities.

The inaugural CUTP was run in the second semester of 2018, bringing together over 150 undergraduate and postgraduate students from seven courses across the University of Sydney, the University of Technology Sydney, the University of NSW and Western Sydney University.

Each course adopted either the Landcom Bella Vista or Tallawong Station precincts (part of our SMNW Places program) as their semester-long case study. Landcom provided information about their objectives for the project to all participating students at a joint briefing on 10 August 2018.

The best student groups pitched their ideas and development proposals to judges from Landcom at the end of the semester, at a final event on 19 October 2018, with prizes awarded for the most innovative proposals that met Landcom's objectives.

In addition to the CUTP, Landcom provided opportunities for over 100 other postgraduate students from The University of Technology Sydney, Western Sydney University, Macquarie University and the University of NSW to engage with Landcom projects through guest lectures provided by Landcom senior managers, visits to project sites, and student research and case study projects.

⁴² Airds: 26% unemployment rate: <https://profile.id.com.au/campbelltown/employment-status?WebID=100>; Claymore: 27% unemployment rate: <https://profile.id.com.au/campbelltown/employment-status?WebID=100>

Innovation Performance Results

Landcom's Sustainable Places Strategy addresses *Innovation*. This focus area forms part of our Productive Places pillar and is a representation of our commitment to advancing innovation through our business, and to our communities.

FY19 Targets and Performance

In FY19 our targets for the delivery of electric vehicle charging and public Wi-Fi remain out of scope, due to no new projects being delivered or sold during the reporting period.

Indicator	Objective	Target	FY18 performance	FY19 performance
Innovation	Research Investment	Measure and report annual investment in research and development.	\$875,289 cash	\$491,840 cash \$402,708 in-kind
		All project teams engaged in Landcom's Roundtable 'Communities of Practice' program.	Four project teams engaged	Two project teams engaged
		To pioneer new ideas and foster opportunities within our innovation economy.	Greenfield/Regional: all new communities provide electric vehicle chargers to service a minimum 10% total dwellings (as either publicly accessible or private use). Urban Renewal/High Density: provide a minimum 10% parking yield, per parking lot, as EV Charge Station 'turn-key' ready at development completion. Key open spaces to provide free Wi-Fi access.	No projects in scope

Research Investment

In FY19 Landcom contributed \$894,548 total investment value into collaborative research led by participants of Landcom's Roundtable. In FY19 this includes \$402,708 worth of estimated in-kind value contribution from Landcom employees⁴³, based on research investment made at or before 30 June 2019. In addition, approximately \$1.1 million worth of in-kind time contributions was made by NSW government agencies or university partners. Many projects undertaken by Landcom's Roundtable include long-term research outcomes, and as such may be included across multiple reporting years.

Landcom has also been a funding contributor to the CRC Low Carbon Living (CRCLCL) for the past eight years. In FY19 we maintained our ongoing annual investment of \$16,000. The CRCLCL program closed at the end of this reporting period.

In FY19 there were 14 new or ongoing research projects related to our operations. A summary is provided opposite.

⁴³ Due to the organisational separation from UrbanGrowth NSW Development Corporation during FY18 we are unable to accurately reflect the in-kind contribution of Landcom employees only; as disclosed in our FY18 report.



Research Projects	Description
Sustainable Urban Food Production	Explores the relationship between local food ecologies and urban redevelopment.
Creating the City We Want	Investigates barriers to housing diversity in NSW with consideration to diverse family structures, cultural groups and aging.
Healthier Higher Density Living	Generates new knowledge and tools to address gaps in understanding the way health evidence can be applied to the planning of higher density urban precincts.
From Suburban to Urban	Reviews open space definitions, typologies and uses by public to better inform local and state policies and practices in the provisioning and delivery of open spaces.
Phytoremediation of Contaminated Land	Demonstrates how phytoremediation can be used to rehabilitate and restore balance to contaminated soil.
Designing Bio-Shelters	Applies cutting-edge modelling techniques more usually applied to architectural problems to design artificial habitats for native biodiversity in heavily urbanised estuaries.
New Generation Workspace and Precinct Activation	Assesses how workspaces can be integrated into new developments and within planning regulations. It also includes architecture and design studio projects which will experiment with different spatial configurations, typologies and concepts for the zone.
Strategies for Planning Safe and Secure Public Domain	Examines how counter-terrorism protective security can be integrated into design and development processes for crowded public places in Australia.
Valuing Creative Placemaking	Evaluates creative placemaking activities and links to social and economic value. Assesses the direct or associated financial value for developers.
Community Engagement 4.0	Demonstrates public sector innovation through the use of Urban Pinboard as a community engagement tool. Uses 3D modelling to assist in explaining planning concepts to the public.
Predictive Housing Price Model	Develops a framework and tool to more accurately forecast long-term (8 to 10 years) real estate prices in the Sydney residential property market.
Collaborative Robotics	Investigates how collaborative robotics can help address the shortage of skilled labour to meet NSW housing goals.
Cooling the Commons	Evaluates how heat impacts people's movement between indoor spaces and use of the public realm, such as footpaths, shops, schools, parks, workplaces.
Affordable Build-to-Rent	Critically evaluates built-to-rent potential to deliver affordable housing in the Australian market, based on international case studies in the UK and USA.

Emerging Technologies

In FY19 Landcom had no projects in scope for our targets related to the provision of electric vehicle (EV) rapid charge stations or shared charging points. This target applies to new Landcom communities, for which we had none in scope this reporting year.

However, during FY18-19 we partnered with Sustainability Advantage (NSW Office of Environment and Heritage) to identify ways we can advance the provision of EVs across our existing projects, and drive the uptake of EVs by residents of our communities. Through this collaboration Landcom, Sustainability Advantage and our consulting partner developed a methodology to analyse vehicle trip logs and establish the individualised business case for the vehicle owner or operator's transition to EVs.

Developing this information and data set supports us in communicating the operational insights, costs, and benefits of adopting EVs to future development partners, and residents. Our aim is to encourage the uptake of low-carbon transport usage across Landcom communities using evidence and data. Landcom has used this data to inform the return on investment of transitioning our own fleet vehicles to EVs.

Equitable Access to Information

There were no new projects in scope for this target during the reporting period. Landcom has included this requirement in all Expressions of Interest and Invitations to Tender sent to market during FY19. We expect to report against this target in FY20.



Robotics in action at a Landcom event.

Case Study: Collaborative Robotics

As part of our commitment to leadership Landcom entered into a collaborative research project with Western Sydney University, the University of NSW and the University of Sydney as part of our Roundtable in 2018. We explored the question 'How can collaborative robotics (Cyber-physical system, social robotics, and human computer interaction) help to address the shortage of skilled labour to meet NSW's housing goals?'

Industry wide, an increasing shortfall in qualified building tradespersons is expected to constrain the future delivery of quality housing to meet the needs of the diverse communities in which we operate. The adoption of robotic technologies on construction sites offers potential to address this challenge and minimise hazards to workers, speed up processes, reduce waste, shorten construction timescales and reduce costs.

The adoption of robotic technologies in construction is a rapidly changing field. An international review found there are very few instances of wide-scale collaborative robotics adoption in construction globally, and no examples in Australia. However, there are a growing number of innovative start-up companies and established construction industry players interested in the potential offered by CoBots (collaborative robots).

The research team held a series of workshops with Landcom sub-contractors to determine the most suitable trades for CoBots at construction sites, and potential challenges with introducing CoBots. This ranged from mobility and safety considerations, to the need for re-training.

Researchers then analysed the workflow of carpenters working on a Landcom construction site and used motion tracking technology in lab-based experiments to explore how tradespersons and CoBots could collaborate.

This early stage research will be completed in FY20, providing a sound foundation for further development of technological innovations to improve the safety, productivity and quality of housing construction in Australia.



Accountable & Collaborative Places

Accountability & Collaboration is our governance principle.

Our Leadership Goal is to deliver accountability and performance along our value chain.

To advance our business approach to delivering productive cities, our current and short term priorities are outlined below. Future targets and measures will be adopted over time, where appropriate.

Accountability

- Participate in Global Real Estate Sustainability Benchmarking to independently verify our sustainability performance.
- Continue to report sustainability performance in line with Global Reporting Initiative Guidelines.
- Develop an approach to Human Rights with consideration for Modern Slavery.

Supply Chain Collaboration

- Seek to broaden our approach to include industry partnerships in support of reducing instances of social issues that impact the development and construction industry (e.g. suicide).
- Work with industry to upskill the supply chain on sustainability issues (e.g. through partnership with Supply Chain Sustainability School).

Relevant Sustainable Development Goals



Accountable & Collaborative Places Overview

Landcom's Accountable & Collaborative Places pillar is focused on a leadership goal to '*drive accountability and performance along our value chain*'. This leadership goal was developed to reflect Landcom's commitment to robust governance collaboration within our organisation and supply chain.

Accountability means creating a system with a level playing field in which decisions are made for the betterment and benefit of all stakeholders. Performance means seeking ever greater improvements in efficiency and outcomes. Our value chain refers to all organisations that we deal with in our operations. By championing better ways to approach business we seek to lead the industry in trust, transparency, governance and efficient outcomes.

Landcom addresses accountability and collaboration through the following focus areas:

- Accountability
- Supply Chain

Both of these focus areas includes a suite of priorities or actions to measure our success. While this pillar includes individual priorities for achievement, it also has a broad governance reach across Landcom's entire Sustainable Places Strategy.

Management Approach

Accountability

Landcom is committed to supporting international agreements, protocols and targets to ensure our planet and communities thrive into the future. Urban development and the property sector make a material contribution to global emissions, the quality of life experienced by citizens and the resilience of our built and natural environments.

Therefore, Landcom believes it is critical to align with, and report our contribution towards the United Nations Global Compact, Sustainable Development Goals, Resilient Sydney Strategic Directions and COP21 Paris Agreement.

In FY19 Landcom placed a high focus on advancing our review of our human rights risks and opportunities across corporate and development operations. The recent introduction of federal modern slavery legislation, and growing stakeholder awareness of corporate social responsibility for human rights, has led organisations such as ours to seek a detailed understanding of potential human rights impacts within our operations or supply chain. In seeking to understand Landcom's relationship to human rights we:

- mapped Landcom's stakeholder activities and relationships
- completed a desktop review and internal stakeholder engagement interviews to identify relevant human rights risks and issues
- prioritised and consolidated the human rights risks and issues based on saliency and Landcom's potential to influence, mitigate or remediate the risk or issue
- validated identified risks with key Landcom internal stakeholders.

Human rights issues most relevant to Landcom were identified across five enduring rights, including labour, civil and political, culture and heritage, security and privacy, land and environment. Within these, our three priority areas to focus will include modern slavery, workplace diversity and inclusion, and workplace health and wellbeing.

We are already well underway in progressing our approach to modern slavery, diversity and inclusion. In FY20 we will formalise our method to address these rights and embed an appropriate management approach. To see our FY19 progress on modern slavery see [Accountability Performance Results](#) (p. 50).



Framework	Our Response
United Nations Global Compact (UNGC)	In February 2019 Landcom became a Participant of the United Nations Global Compact. We will report our Communication on Progress annually.
Sustainable Development Goals	Our Sustainable Places Strategy was directly informed by the Sustainable Development Goals (SDGs). We report our contribution to the SDGs annually. See Appendix B: Sustainable Development Goals Alignment (p. 56).
Paris Agreement COP21	Our environmental leadership goal is to 'enable carbon neutral outcomes at communities by 2028'. See Greenhouse Gas Emissions Reduction (p. 18) and Urban Heat Island Reduction (p. 15).
Global Real Estate Sustainability Benchmark (GRESB)	Landcom voluntarily participates in the Global Real Estate Sustainability Benchmark (GRESB) Developer Assessment. It evaluates the environmental, social and governance (ESG) performance of companies, organisations and fund managers that focus on development activities, rather than the management of standing investments. See Global Real Estate Sustainability Benchmark (p. 51).
NSW Government Resource Efficiency Policy	We report our overall sustainability performance against the NSW Government Resource Efficiency Policy (GREP), which guides our approach to energy, water and waste efficiency in our corporate operations, and helps demonstrate Landcom's alignment with the NSW State Government's sustainability goals. ⁴⁴ For our FY19 performance against the GREP see Accountability Performance Results (p. 50).
Human Rights	Landcom operates entirely within NSW, and as such benefits from high standards of governance and legislation Australia adopts regarding human rights. We are a Participant to the United Nations Global Compact (UNGC) and we support the ten principles of the Global Compact on human rights, labour, environment and anti-corruption. We focus on human rights areas we have the potential to influence, mitigate or remediate. This includes our identified focus areas of modern slavery, workplace diversity and inclusion, and workplace wellbeing. To see more on our management approach for Human Rights see p. 48.

Supply Chain

Landcom has two main interfaces with our supply chain, being our corporate procurement for goods and services, and development procurement for the design and delivery of our assets. We believe in partnering with industry organisations that share the same values and aspirations as Landcom.

We are committed to driving accountability and performance along our value chain. This means proactively engaging with our suppliers, particularly those we partner with to deliver our projects. As part of our management approach Landcom is a member of the Australian Supply Chain Sustainability School.

Launched in Australia in 2015, the School works to develop the sustainability skills and knowledge of those working in complex property and construction supply chains. Through self-assessment tools and free resources, it helps organisations of all sizes address issues such as modern slavery, sustainable procurement and materials innovation.

We embed requirements in civil and landscape works contracts for suppliers to become members of the Supply Chain School and participate in upskilling their own employees. This is also a mandatory requirement when we divest assets through our contracts of sale.

⁴⁴ As outlined in *NSW 2021: A Plan to Make NSW Number One* which aims to drive resource efficiency by NSW Government agencies in three main areas — energy, water and waste — and to reduce harmful air emissions from government operations.

Accountability Performance Results

Landcom’s Sustainable Places Strategy addresses *Accountability*. This focus area forms part of our Accountable & Collaborative Places pillar and is a representation of our commitment to robust governance and performance, both within our own organisation and in our supply chain.

Our Annual and Sustainability reporting continues to be an important part of how we transparently share our organisational performance with our stakeholders.

Sustainable Development Goals

Landcom reports our alignment and contribution to achieving the Sustainable Development Goals (SDGs).

Landcom’s Sustainable Places Strategy is aligned to all of the SDGs. Each year we will continue to track our progress against meeting the SDGs and their respective targets relevant to Landcom and our operations.



To see our full alignment against the SDGs, and our targets and actions in FY19 to address them, refer to [Appendix B: Sustainable Development Goals Alignment](#) (p. 56).



Global Real Estate Sustainability Benchmark

In FY19 Landcom participated in the Global Real Estate Sustainability Benchmark (GRESB) Developer Assessment. This was our third year participating in GRESB.

We achieved a score of 91/100, accompanied by a Green Star rating representative of Landcom's performance within the top 20% of all participants. Overall our performance positions Landcom as third most sustainable developer in the Asia Pacific, and fourth globally, compared to other participants using the Developer reporting module.

Landcom continues to perform strongly for Management and Policy compared to our peer group. This is highly reflective of our efforts to maintain a high level of governance and probity over our operations.

The following table summarises our results and benchmarking.

FY18	FY19
<p>90 Overall score</p>  <p>64 GRESB average</p> <p>67 Peer average</p>	<p>91 Overall score</p>  <p>68 GRESB average</p> <p>69 Peer average</p>
<p>Peer comparison</p> <p>3rd out of 18 Developer/Asia Pacific</p>  <p>4th Globally</p>	<p>Peer comparison</p> <p>3rd out of 21 Developer/Asia Pacific</p>  <p>4th Globally</p>
<p>Implementation & Measurement</p> <p>87/100</p> <p>60 GRESB average 64 Peer average</p>	<p>Implementation & Measurement</p> <p>84/100</p> <p>62 GRESB average 63 Peer average</p>
<p>Management & Policy</p> <p>93/100</p> <p>67 GRESB average 69 Peer average</p>	<p>Management & Policy</p> <p>95/100</p> <p>71 GRESB average 73 Peer average</p>
<p>GRESB Green Star</p> 	<p>GRESB Green Star</p> 

Modern Slavery

The Federal Modern Slavery Act commenced on 1 January 2019. The Act requires entities with an annual revenue of \$100 million or more based or operating in Australia to prepare annual statements on potential modern slavery risks in their operations and supply chains and disclose the steps they have taken in addressing those risks. From FY20 Landcom will be a reporting entity under this Act.

In FY19 we became founding members of the Property Council of Australia Supplier Engagement Platform. This is an industry initiative by the top developers and construction firms in Australia taking a collaborative due diligence approach to our shared supply chain.

This will continue throughout FY20 as we progress a comprehensive strategy for managing modern slavery risks within our operations and supply chain.

Diversity & Inclusion

In FY19 Landcom continued to advance our workplace approach to diversity and inclusion. This included establishing an employee led Diversity & Inclusion working group, adopting an industry benchmarked Diversity & Inclusion Policy and establishing measurable targets for future performance reporting.

In FY20 we will seek to adopt the GRI Standards for reporting diversity and inclusion within Landcom, in conjunction with a new management approach.

NSW Government Resource Efficiency Policy (GREP)

Throughout the reporting period Landcom continued to voluntarily adopt the NSW Government Resource Efficiency Policy (GREP). The GREP helps the NSW Government to set an example in addressing the challenge of rising resource costs, and reducing impacts on our economy, environment and community.

The GREP guides Landcom's approach to energy, water and waste efficiency in our corporate operations, and helps us align with the State Government's sustainability goals.⁴⁵ Key activities in the reporting year related to the GREP include:

- a total of 10.47 tonnes of Scope 1 CO₂ emissions were recorded for the reporting year. Sources were one sales office (gas) and Landcom's fleet vehicles (fuel combustion). Landcom had no biogenic emissions. We are currently in the process of offsetting our fleet vehicle emissions from FY18 and FY19 (combined c.25 tonnes CO₂-e).
- Landcom had no Scope 2 emissions, as the 142,381kWh of electricity used to power our office was 100% Green Power
- maintained our 6 Star NABERS Energy Rating for our Parramatta Office.

To date, Landcom has not set a baseline year for our Scope 1 or Scope 2 emissions as we have consistently purchased green power or offset all our emissions within operational control. We do adopt the National Greenhouse and Energy Reporting (NGER) Scheme global warming potential account factors. We also use the tool CCAP Integrated to capture and synthesise our data, which also follows the NGER Scheme protocols.

Case Study: LifeStreet Employee Assistance Program

Landcom recognises that managing work, relationships, caring responsibilities, finances and other life needs can be challenging at times for us all. To support our staff, in FY19 Landcom introduced LifeStreet – a new Employee Assistance Program focused on wellbeing and an individual's life as a whole.

LifeStreet offers workplace assistance services to all staff and immediate family members, and also has resources and tools for staff to use in their lives more broadly.

Digitally based, users can access their own LifeStreet profile via a secure login, and use a self-assessment tool to help direct them to the appropriate resources on their platform. Topics span health and wellness, family and relationships, work and career, psychological and emotional wellbeing, carers' needs, financial management and planning, and purpose and contribution. Users can also be connected to coaches or medical professionals – such as sleep psychologists if that is an area of personal wellbeing improvement a user may need support with.

⁴⁵ As outlined in *NSW 2021: A plan to Make NSW Number One*, which aims to drive resource efficiency by NSW Government agencies in three main areas – energy, water and waste – and also reduce harmful air emissions from government operations.

Supply Chain Performance Results

Landcom's Sustainable Places Strategy addresses Supply Chain. This focus area forms part of our Accountable & Collaborative Places pillar and is a representation of our commitment to robust performance, both within our own organisation and in our supply chain.

Upskill Our Supply Chain

A key way Landcom drives the uptake of the Supply Chain School's content with our suppliers is through contractual obligations. In FY18 we began requiring contractors who work on projects, and developers who purchase land from us, to become members of the School. We are currently in the process of testing the successful uptake of this requirement, and will report on progress again in FY20. We are also exploring how to expand this requirement to major works contracts such as civil construction and landscaping.

In FY20 we will continue to explore opportunities for supplier engagement, and further embed the resources provided by the Supply Chain School into training modules for Landcom staff and our supply chain.



Civil works construction at the Oran Park Town community in Oran Park.

Case Study: Sustainability Advantage

In recognition of Landcom's continued advancement in integrating sustainability into business as usual activities the NSW Minister for Environment and Energy presented Landcom with a Bronze award in June 2019 as part of the Sustainability Advantage Recognition Scheme. The award honours significant advancement within the first year of joining the Sustainability Advantage program run by the NSW Office of the Environment and Heritage.

The award was strongly influenced by Landcom's Sustainability Rebate Scheme on the Macarthur Heights project launched in 2019 which is designed to encourage individual home owners to build more efficient, healthy homes for themselves and the environment.

The Office of Environment and Heritage's criteria for recognition rest upon participating organisations achieving progress in the following areas:

- Active participation in the program
- Demonstrated leadership and commitment to sustainability
- Established planning and management systems for environmental practice, including processes for continuous improvement
- Engagement: Promoting sustainability practices internally among staff, and externally with suppliers, customers and the wider industry
- Achievements: Demonstrated environmental outcomes in the last 12 months.

Landcom sees strong benefits in participating in the program to advance shared knowledge and learning with parts of industry we would not normally interact with, gaining direct access to Office of Environment and Heritage programs, participation in leading thinking which aligns with Landcom's objectives and access to resources to support Landcom's Sustainable Places Strategy priorities.

We are committed to ongoing participation in the Sustainability Advantage program and will strive to further embed innovative sustainability initiatives across our business.

Appendix A: Assurance Statement

Independent Assurance Statement to the Board and Management of Landcom



We, Point Advisory Pty Ltd ('Point Advisory'), performed independent assurance over selected performance data and statements presented in Landcom's FY19 Sustainability Report ('the Report') which includes performance over the period 1 July 2018 – 30 June 2019.

Respective responsibilities

- Landcom management is responsible for the preparation and presentation of the information within the Report. Landcom management is also responsible for the design, implementation and maintenance of internal controls relevant to the preparation of the Report, so that it is free from material misstatement. Landcom management is also responsible for setting targets and for the development of appropriate internal controls to monitor performance.
- Point Advisory's responsibility, in accordance with Landcom management's instructions, is to carry out a 'limited level' ASAE3000¹ assurance engagement on selected data and performance claims in the Report and a Type 2 'moderate level' of assurance over the Report in accordance with AccountAbility's AA1000AS (2008)². We do not accept or assume any responsibility for any other purpose or to any other person or organisation. Other stakeholders should do their own due diligence before taking any action as a result of this statement.

Criteria

We have used the following criteria against which to evaluate the content of the Report:

- The AA1000 AccountAbility Principles of Inclusivity, Materiality and Responsiveness
- The Global Reporting Initiative's Sustainability Reporting Standards (GRI Standards)
- Landcom's own reporting criteria (as set out in the Report) and relevant policies and procedures to evaluate the selected data.

Our methodology

Our assurance engagement was planned and performed in accordance with ASAE3000 and AA1000AS (2008). The procedures we performed were based on our professional judgement and included the steps outlined below:

- Interviewed a selection of Landcom's executives and managers to understand its material sustainability topics ('material topics') and the effectiveness of its responses, including how sustainability is integrated across the organisation and projects.
- Reviewed a selection of corporate documents including the Sustainable Places Strategy and other key internal documents to understand Landcom's material topics, how they are managed and what progress was made during the reporting period.
- Reviewed the coverage of material topics within the Report against the key sustainability topics raised in media reports, peer reports, management interviews, key internal documents and the outputs from Landcom's materiality process.
- Interviewed data owners of selected data sets to understand how they collected, calculated and aggregated sustainability data from projects as well as what assumptions or estimations were made.
- Sought and reviewed supporting information or explanations for selected data, statements and claims within the Report regarding Landcom's sustainability performance.
- Checked whether sustainability data in the Report had been calculated and aggregated accurately, was consistent with Landcom's internal records, and according to managements explanations and disclosures.
- Reviewed and assessed Landcom's reported alignment with the requirements of the GRI Standards.

The limitations of our review

Our evidence gathering procedures were designed to obtain a 'limited level' of assurance (as set out in ASAE3000) on which to base our conclusions. The extent of evidence gathering procedures performed is less than that of a reasonable assurance engagement (such as a financial audit) and therefore a lower level of assurance is provided. Further to this, we did not visit project sites or interview project teams.

Our conclusions and observations

Our detailed observations and areas for improvement will be raised in a report to Landcom management.

In line with the scope of our independent assurance engagement, including the criteria and methodology described above, we conclude that:

- based on our 'limited' assurance procedures under ASAE3000, nothing has come to our attention that causes us to believe that selected sustainability disclosures have not been reported fairly and accurately.
- based on our 'moderate level' of assurance procedures under AA1000AS (2008), nothing has come to our attention that causes us to believe that Landcom has not adhered to the AA1000 AccountAbility Principles of Inclusivity, Materiality and Responsiveness when reporting its sustainability performance.

¹ Standard on Assurance Engagements ASAE 3000 *Assurance Engagements Other than Audits or Reviews of Historical Financial Information* Issued by the Auditing and Assurance Standards Board

² AA1000 AS (2008) Assurance Standard



Completeness and accuracy of performance information

We have reviewed information or explanations for selected data and statements on Landcom's sustainability activities presented in the Report and we are not aware of any misstatements in the assertions made.

Evaluating adherence to AA1000 AccountAbility Principles

Our detailed conclusions regarding Landcom's adherence to the AA1000 AccountAbility Principles and selected observations are provided below, and do not affect our conclusions on the Report set out earlier in this statement.

AA1000 AccountAbility Principles	Conclusions	Observations
Inclusivity Has Landcom included stakeholders in developing and delivering its sustainability approach?	We are not aware of any key stakeholder groups which have been excluded from engagement nor any matters that would lead us to conclude that Landcom has not applied the inclusivity principle in developing its approach to sustainability.	Landcom understands the benefits of engaging with its stakeholders, with both its Strategic Directions and Sustainable Places Strategy reflecting stakeholder engagement-related performance objectives. During the reporting period Landcom maintained its stakeholder feedback channels and made demonstrable progress towards embedding its stakeholder engagement approach (Join In) across the organisation and within projects.
Materiality Has Landcom provided a balanced representation of material topics concerning its sustainability performance?	We are not aware of any material topics in our review of Landcom sustainability governance documentation which have been excluded from the Report, and nothing has come to our attention that causes us to believe that Landcom management has not applied its processes for determining material topics to be included in the Report.	Landcom refreshed its materiality assessment during the reporting period, identifying its eleven material matters. Each of the identified topics are relevant to one or more of the four categories of its Sustainable Places Strategy. These matters have guided Landcom's disclosures against the GRI Standards topic disclosure requirements. Several new topics were identified and Landcom has committed to developing or formalising respective management approaches to those matters where required.
Responsiveness Has Landcom responded to stakeholder perspectives and their interests and concerns?	We are not aware of any key actions or initiatives responding to material topics which have been excluded from the Report nor any matters that would lead us to conclude that Landcom has not applied the responsiveness principle in considering the matters to be reported.	Landcom's Sustainable Places Strategy remains in place with the strategy's vision, goals, and targets demonstrating a comprehensive response to stakeholder perspectives and material topics. The strategy's leadership goals and aspirational targets continue to drive the organisation's responses to key impacts and where it can continue to demonstrate sustainability leadership in the industry and among government agency peers.

Review of alignment with the GRI Standards

We have reviewed Landcom's reported alignment with the GRI Standards and we are not aware of any misstatements in the assertions made.

Our independence

We are not aware of any issues that could impair our independence or objectivity for this assurance engagement. Point Advisory's independence policy and supporting measures apply to management and professional staff. This policy also prohibits any financial interests in our clients that would or might be seen to impair independence.

Our team

Led by a Lead Certified Sustainability Assurance Practitioner (CSAP), our assurance team has qualifications and experience in applying the ASAE3000, AA1000AS (2008) and GRI Standards relevant for this sustainability assurance engagement.

On behalf of the assurance team.

Alan Dayeh

Managing Principal, NSW

Lead CSAP (AccountAbility UK)

Point Advisory, Sydney

25 October 2019



Appendix B: Sustainable Development Goals Alignment



Landcom is committed to supporting international agreements, protocols and targets to help ensure our planet and communities thrive into the future. As part of this commitment we report our contribution to the United Nations Sustainable Development Goals (SDGs).⁴⁶

In summary, our *Climate Resilient Places* pillar supports SDGs 1, 2, 6, 7, 9, 11, 12, 13 and 15.

Our *Healthy & Inclusive Places* pillar supports SDGs 1, 2, 3, 5, 10, 16 and 17.

Our *Productive Places* pillar supports SDGs 4, 8, 9 and 10.

Our *Accountable & Collaborative Places* pillar supports SDGs 8, 16 and 17.

SDG Goal & Target	Landcom Response
 <p>Goal 1: End poverty in all its forms everywhere</p> <p>Target: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters</p>	<p>Landcom supports the ending of poverty through our mandate to provide Affordable Housing.⁴⁷ We expand on this to ensure housing diversity and accessibility are addressed, for equity.</p> <p>Healthy & Inclusive Places Targets</p> <p>Deliver 5-10% Affordable Housing across the Landcom portfolio.</p> <p>Deliver 10-15% diverse housing across our portfolio</p> <p>20% of medium to high density dwellings within all new projects are achieve Livable Housing Australia Silver Certification (or equivalent).</p> <p>Landcom further supports all community members, including the vulnerable, to increase their resilience to climate related extremes and other shocks or stresses through our commitments to building resilience.</p> <p>Climate Resilient Places Targets</p> <p>All projects to prepare and implement an effective Climate Change Adaptation Plan; and Community Resilience Plan.</p>
 <p>Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture</p> <p>Target: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round</p>	<p>Landcom is seeking ensure access to nutritious food by mandating the adoption of independent rating tools – such as Green Star Communities. Within these tools, we will aim to achieve all credits related to ‘access to fresh food’.</p> <p>Climate Resilient Places Targets</p> <p>All projects will adopt the use industry recognised rating tools at a masterplan and built form scale, achieving not less than ‘Australian Best Practice’ equivalent.</p>

⁴⁶ United Nations Sustainable Development Goals (2018) <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

⁴⁷ Managed or owned by a Community Housing Provider for not less than 10 years, and accessible to people who meet the government means testing (or other criteria) for access to Affordable Housing.

SDG Goal & Target	Landcom Response
 <p>Goal 3: Ensure healthy lives and promote wellbeing for all at all ages</p> <p>Target: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and wellbeing</p>	<p>Landcom is committed to ensuring our communities are mentally and physically well. We address this through the design of our communities, and activities or programs we offer throughout the year. We then measure our ongoing success through direct engagement with the people living in our communities.</p> <p>Healthy & Inclusive Places Targets</p> <p>All projects provide design, programs or events that encourage active, social and healthy eating lifestyles, achieve 90% resident reported health and wellbeing.</p> <p>All new projects are designed and delivered to achieve 90% resident satisfaction with public, active and sustainable transport options to key amenities, services, public transport and employment.</p> <p>Activities</p> <p>FY19 Landcom Community Development programs related to health, offered at various projects.</p> <p>FY19 Landcom and Welcome Dinner Project partnership piloted, focused on connecting people, reducing social isolation, and supporting positive mental health outcomes.</p> <p>FY19 we launched LifeStreet as our preferred Employee Assistance Program focused on whole of life support to the individual.</p>
 <p>Goal 4: Ensure inclusive and quality education for all and promote lifelong learning</p> <p>Target: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship</p>	<p>Landcom believes that equitable access to education and opportunities is an important part of delivering our communities. We address this through our targets and programs/activities offered at our projects.</p> <p>Productive Places Targets</p> <p>Projects to engage and foster education, learning or employment outcomes via activities or initiatives, based on identified needs of the local and regional community.</p> <p>Activities</p> <p>FY19 Landcom Skills Exchange, offered at two communities to support at risk secondary school students, and long-term unemployed people, to engage in meaningful learning, skills development and/or employment.</p>
 <p>Goal 5: Achieve gender equality and empower all women and girls</p> <p>Target: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life</p>	<p>Landcom is committed to diversity and inclusion, including the engagement of women and girls.</p> <p>Healthy & Inclusive Places Priority</p> <p>Identify opportunities to positively impact diversity, inclusion and accessibility.</p> <p>Activities</p> <p>FY19 Landcom adopted its Diversity & Inclusion Policy, and established a staff led Diversity & Inclusion working group.</p>

SDG Goal & Target	Landcom Response
 <p>Goal 6: Ensure access to water and sanitation for all</p> <p>Target: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity</p>	<p>Landcom recognises that water scarcity and drought is an increasing issue for Australia. We are committed to enhancing the efficiency, reducing the unnecessary use of potable water, and ensuring water quality is not negatively impacted by our activities or the communities we build.</p> <p>Climate Resilient Places Targets</p> <p>Achieve water positive communities by 2028.</p> <p>All projects modelled to reduce mains potable water demand by 50% at the precinct scale against a 2016 reference case.</p> <p>BASIX 60 water target for all new dwellings within our development control.</p> <p>Water Sensitive Urban Design strategy for all projects, pollutant discharge loads not to exceed Nitrogen 45, Phosphorus 65, Suspended Solids 85, Gross Pollutants 90.</p>
 <p>Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all</p> <p>Target: By 2030, increase substantially the share of renewable energy in the global energy mix</p>	<p>Australia is privileged to have reliable energy sources, therefore Landcom's focus is on enhancing efficiency, improving cost of living, and increasing the use of renewables.</p> <p>Climate Resilient Places Targets</p> <p>5% of predicted energy demand supplied from onsite renewable energy, where site constraints permit</p> <p>All new projects modelled to reduce Greenhouse Gas (GHG) emissions at a precinct scale (transport and stationary) by 50% against 2016 reference case (CCAP PRECINX modelling).</p> <p>Activities</p> <p>Landcom's Sustainability Rebate for home owners was rolled out to Macarthur Heights in FY19.</p>
 <p>Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all</p> <p>Target: Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms</p>	<p>Landcom aims to support the Greater Sydney Commission objective to achieve a 30 minute city. We are focused on ensuring land use diversity across our projects to promote jobs close to homes.</p> <p>We are also committed to identify any risks of modern slavery or human rights infringements within our operations or supply chain, and take action.</p> <p>Productive Places Targets</p> <p>Enable 30,000 enduring jobs by 2036.</p> <p>Accountable & Collaborative Priorities</p> <p>Develop an approach to human rights with consideration for modern slavery.</p> <p>Activities</p> <p>In FY19 Landcom became a Participant to the United Nations Global Compact, committing to embed the 10 Principles in our operations.</p> <p>We also completed a Human Rights Salience Assessment, prioritising our three human rights focus areas for FY20.</p>

SDG Goal & Target	Landcom Response
<div> </div> <p>Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation</p> <p>Target: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human wellbeing, with a focus on affordable and equitable access for all</p>	<p>Landcom is committed to delivering and enabling resilient infrastructure and communities. We address this through our Climate Resilient Places targets, such as mandating resilience risk assessments and adaptation plans, adopting independent rating tools and pushing for highly efficient buildings.</p> <p>Climate Resilient Places Targets</p> <p>All projects will adopt the use industry recognized rating tools at a masterplan and built form scale, achieving not less than 'Australian Best Practice' equivalent.</p> <p>Above standard NABERS and BASIX building ratings.</p> <p>All projects to prepare and implement an effective Climate Change Adaptation Plan; and Community Resilience Plan.</p> <p>Productive Places Targets</p> <p>All new greenfield or regional communities provide electric vehicle chargers to service a minimum 10% total dwellings as either publicly accessible or for private use.</p> <p>All new urban renewal or high density communities provide a minimum 10% parking yield, per parking lot, as electric vehicle charge station 'turn-key' ready at development completion.</p> <p>All key open spaces to have free wifi.</p> <p>Activities</p> <p>FY18-19 we partnered with Sustainability Advantage (NSW Office of Environment and Heritage) to identify ways we can advance the provision of EVs across our existing projects, and drive the uptake of EVs by residents of our communities.</p>

SDG Goal & Target



Goal 10: Reduce inequality within and among countries

Target: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

Landcom Response

We are focused on ensuring equity and inclusion across the communities we are delivering, which is why we measure satisfaction with quality of life from our residents through our Healthy & Inclusive Places Survey. This information helps us identify areas to improve the social and economic inclusion of all members in our communities.

Healthy & Inclusive Places Target

Achieve 90% resident satisfaction with quality of life, as measured by the Personal Wellbeing Index.⁴⁸

Healthy & Inclusive Places Priority

Identify opportunities to positively impact diversity, inclusion and accessibility.

Activities

FY19 Landcom adopted its Diversity & Inclusion Policy, and established a staff led Diversity & Inclusion working group.

FY19 Landcom Community Development programs for a broad range of interests and needs, offered at various projects.

FY19 Landcom and Welcome Dinner Project delivered at Thornton, focused on connecting people, reducing social isolation, and supporting positive mental health outcomes.

Productive Places Targets

Measure and report annual investment in research and development supporting our strategy principles of fostering a sustainable environment, driving social equity, enabling an innovative economy and advancing responsible governance.

Projects to engage and foster education, learning or employment outcomes, based on identified needs of the local and regional community.

Activities

Engaged over 700 students across our Skills Exchange, research and excursion programs.

⁴⁸ Personal Wellbeing Index, Deakin University & Australian Unity (2017) australianunity.com.au/.../wellbeing%20index/wellbeing%20index%202020

SDG Goal & Target	Landcom Response
 <p>Goal 11: Make cities inclusive, safe, resilient and sustainable</p> <p>Target: By 2030, ensure access for all to adequate, safe and affordable housing and basic services</p> <p>Target: By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities</p>	<p>Landcom’s objective is to deliver affordable and sustainable communities. We do this through our commitments to sustainability, housing affordability and diversity, and the provision of parks and open spaces throughout our communities – that are safe and equitable.</p> <p>Healthy & Inclusive Places Targets</p> <p>Deliver 5-10% Affordable Housing across the Landcom portfolio.</p> <p>Deliver 10-15% diverse housing across our portfolio.</p> <p>20% of medium to high density dwellings within all new projects are achieve Livable Housing Australia Silver Certification (or equivalent).</p> <p>Achieve a culture of safety throughout our organisation and on all Landcom projects, striving to achieve 90% overall community safety score at our projects.</p> <p>Activities</p> <p>Participated in the creation of Everyone Can Play a NSW government initiative to develop a suite of indicators for inclusive play spaces.</p> <p>Commenced an audit of existing Landcom project parks for their achievement against the Everyone Can Play guidelines to help inform areas for improvement.</p> <p>Climate Resilient Places Targets</p> <p>20-50% of the total project site area, in plan view, is comprised of building or landscape elements that reduce the impact of urban heat island effect.</p>
 <p>Goal 12: Ensure sustainable consumption and production patterns</p> <p>Target: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</p>	<p>Landcom has maintained a waste diversity from landfill target for many years. We continue to see our most material contribution to the SDG as ensuring unnecessary construction waste does not end up in landfill, but is recycled or reused.</p> <p>Climate Resilient Places Targets</p> <p>All new projects divert minimum 95% construction waste from landfill (excluding contamination or hazardous materials).</p> <p>100% timber used in construction is FSC certified (or equivalent).</p>
 <p>Goal 13: Take urgent action to combat climate change and its impacts</p> <p>Target: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</p>	<p>Landcom developed the Sustainable Places Strategy with the SDGs and Paris Agreement at front of mind. Our entire Strategy is focused on combatting climate change and its impacts, and building community resilience to climate induced shocks and stresses.</p> <p>Climate Resilient Places Targets</p> <p>All targets found in this pillar of Landcom’s Sustainable Places Strategy.</p> <p>Activities</p> <p>Collaboration with the CRC for Low Carbon Living to develop an urban heat island mitigation tool.</p>

SDG Goal & Target	Landcom Response
 <p>Goal 14: Conserve and sustainably use the oceans, seas and marine resources</p> <p>Target: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution</p>	<p>Climate Resilient Places Targets</p> <p>Water Sensitive Urban Design strategy for all projects, pollutant discharge loads not to exceed Nitrogen 45, Phosphorus 65, Suspended Solids 85, Gross Pollutants 90.</p>
 <p>Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss</p> <p>Target: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species</p>	<p>One of Landcom’s leadership goals is to ensure net positive ecological outcomes across our portfolio. We address this through the conservation or enhancement of biodiversity and ecological communities at our projects, and encouraging responsible materials sourcing in our supply chain.</p> <p>Climate Resilient Places</p> <p>All new projects enhance the local habitat, biodiversity or ecological communities, compared to the site conditions pre-development.</p> <p>100% timber used in construction is FSC certified (or equivalent).</p> <p>Activities</p> <p>Continued our partnership with the Sustainability Supply Chain School, and plan to make online training and resources available to staff in FY20.</p>
 <p>Goal 16: Promote just, peaceful and inclusive societies</p> <p>Target: Ensure responsive, inclusive, participatory and representative decision-making at all levels</p>	<p>Landcom seeks to advance inclusion and participation within and across communities through our Community Development and Welcome Programs, by sourcing data through our Healthy & Inclusive Places Survey, and between staff within our organisation.</p> <p>Healthy & Inclusive Places Targets</p> <p>Achieve 90% resident reported community cohesion across all new projects, by fostering the integration of community networks and facilities.</p> <p>Healthy & Inclusive Places Priorities</p> <p>Identify opportunities to positively impact diversity, inclusion and accessibility.</p> <p>Accountable & Collaborative Places Priority</p> <p>Develop an approach to Human Rights with consideration for Modern Slavery.</p> <p>Activities</p> <p>In FY19 Landcom became a Participant to the United Nations Global Compact, committing to embed the 10 Principles in our operations. We also completed a Human Rights Salience Assessment, prioritising our three human rights focus areas for FY20.</p>

SDG Goal & Target**Landcom Response**

Goal 17: Revitalize the global partnership for sustainable development

Target: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships

Landcom is committed to promoting effective public, public-private and civil society partnerships and engagement. Our main framework to support this is our Join In Framework, aligned with the IAP2 principles, and dedicated to meaningful engagement.

Healthy & Inclusive Places Targets

All new projects to conform to the community engagement policy, Join In Framework, aligned to industry best practice for stakeholder engagement practice.

Accountable & Collaborative Places Priority

Work with industry to upskill our supply chain on sustainability issues (eg. through partnership with Supply Chain Sustainability School).

Activities

We also continued our partnership with the Sustainability Supply Chain School, and plan to make online training and resources available to staff in FY20.

Appendix C: GRI Content Index

GRI 102: General Disclosures 2016		Location or comment																																																																				
102-01	Name of the organisation	FY19 Annual Report, Our Organisation																																																																				
102-02	Activities, brands, products and services	FY19 Annual Report, Our Organisation																																																																				
102-03	Location of headquarters	Reporting Boundaries																																																																				
102-04	Location of operations	Reporting Boundaries																																																																				
102-05	Ownership and legal form	FY19 Annual Report, Our Organisation																																																																				
102-06	Market served	FY19 Annual Report, Our Principle Objectives and Function																																																																				
102-07	Scale of organisation	FY19 Annual Report, Chair's Review, Project Map and Other Highlights																																																																				
102-08	Information on employees and other workers	<table border="1"> <thead> <tr> <th></th> <th>Female</th> <th>Male</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Staff numbers</td> <td>78</td> <td>77</td> <td>155</td> </tr> <tr> <td>Full-Time</td> <td>69</td> <td>76</td> <td>145</td> </tr> <tr> <td>Part-Time</td> <td>9</td> <td>1</td> <td>10</td> </tr> <tr> <td>Award Staff</td> <td>62</td> <td>49</td> <td>111</td> </tr> <tr> <td>Senior Management Contract</td> <td>16</td> <td>28</td> <td>4</td> </tr> <tr> <td colspan="4">Award Staff</td> </tr> <tr> <td>Full-Time</td> <td>55</td> <td>49</td> <td>104</td> </tr> <tr> <td>Part-Time</td> <td>7</td> <td>0</td> <td>7</td> </tr> <tr> <td>Permanent</td> <td>57</td> <td>43</td> <td>100</td> </tr> <tr> <td>Term</td> <td>5</td> <td>6</td> <td>11</td> </tr> <tr> <td colspan="4">Senior Management Contract</td> </tr> <tr> <td>Full-Time</td> <td>14</td> <td>27</td> <td>41</td> </tr> <tr> <td>Part-Time</td> <td>2</td> <td>1</td> <td>3</td> </tr> <tr> <td colspan="4">Location</td> </tr> <tr> <td>Parramatta</td> <td>77</td> <td>74</td> <td>151</td> </tr> <tr> <td>Other</td> <td>1</td> <td>3</td> <td>4</td> </tr> </tbody> </table>		Female	Male	Total	Staff numbers	78	77	155	Full-Time	69	76	145	Part-Time	9	1	10	Award Staff	62	49	111	Senior Management Contract	16	28	4	Award Staff				Full-Time	55	49	104	Part-Time	7	0	7	Permanent	57	43	100	Term	5	6	11	Senior Management Contract				Full-Time	14	27	41	Part-Time	2	1	3	Location				Parramatta	77	74	151	Other	1	3	4
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102-09	Supply chain	Accountable & Collaborative Places Overview Supply Chain Supply Chain Performance Results Upskill Our Supply Chain																																																																				



102-10	Significant changes to the organisation and its supply chain	In FY19 Landcom had no significant changes to the organisation size, structure, ownership or supply chain.
102-11	Precautionary principle or approach Principle 7	Landcom's approach to Environmental Management can be seen at: https://www.landcom.com.au/assets/Downloads/sustainability/54b56f8418/approach-to-environmental-management.pdf
102-12	External initiatives	FY19 Annual Report, Chairs Review Landcom also highlights its alignment with external initiatives such as the Paris Agreement, United Nations Sustainable Development Goals, United Nations Global Compact within this report, at Accountable & Collaborative Places Overview and Accountability Performance Results.
102-13	Membership of associations	Landcom's main industry memberships include Green Building Council of Australia, Property Council of Australia, Master Builders Association, Urban Taskforce Australia, Urban Development Institute of Australia, Corporate Club of Australia, and Committee for Economic Development of Australia.
102-14	Statement from senior decision-maker	Message from the CEO
102-40	List of stakeholder groups	Appendix D: Stakeholders
102-41	Collective bargaining agreements Principle 3	100% of Landcom staff are covered by the Landcom Award
102-42	Identifying and selecting stakeholders	Design through Engagement
102-43	Approach to stakeholder engagement	Design through Engagement Appendix D: Stakeholders
102-44	Key topics and concerns raised	Appendix D: Stakeholders
102-45	Entities included in the consolidated financial statements	FY19 Annual Report, Statement of Financial Position
102-46	Defining report content and topic boundaries	Reporting Boundaries
102-47	List of material topics	Material Matters
102-48	Restatement of information	Any re-statements are indicated using footnotes in the report
102-49	Changes in reporting	About This Report

102-50	Reporting period	About This Report
102-51	Data of most recent report	FY18 Sustainability Report can be found at: https://www.landcom.com.au/assets/Downloads/sustainability/efc46210dd/2018-sustainability-report.pdf
102-52	Reporting cycle	About This Report
102-53	Contact point for questions regarding the report	Landcom website ' Contact Us '
102-54	Claims for reporting in accordance with the GRI	About This Report
102-55	GRI content index	Appendix C: GRI Reporting Initiative Index
GRI 103: Management Approach 2016		Location or comment
103-1	Explanation of the material topic and its boundary	About This Report
103-2	The management approach and its components	About This Report
103-3	Evaluation of the management approach	About This Report
GRI 201: Economic Performance 2016		Location or comment
201-1	Direct economic value generated and distributed	FY19 Annual Report, including: <ul style="list-style-type: none"> • Chair's Review • FY19 Economic and Financial Highlights • Financial Tables and Notes Note: all operations are within Australia.
201-2	Financial implications and other risks and opportunities due to climate change	Climate Resilient Places Pillar Overview
203-2	Significant indirect economic impacts	Productive Places Overview Training & Employment Performance Results
GRI 301: Materials 2016		Location or comment
301-1	Materials used by weight or volume	Climate Resilient Places Pillar Overview Waste & Materials Performance Results
301-2	Recycled input materials used	



GRI 302: Energy 2016		Location or comment
302-4 Principles 8 & 9	Reduction of energy consumption	Climate Resilient Places Pillar Overview NSW Government Resource Efficiency Policy (GREP) Energy & Emissions Performance Results
302-5 Principles 8 & 9	Reduction in energy consumption of products and services	
GRI 303: Water and Effluents 2016		Location or comment
303-1 Principles 8 & 9	Interactions with water as a shared resource	Landcom has an indirect relationship with water. The greatest impact our developments will have is on the future use by those who live, work and do business in the community once we have delivered it. We do not directly withdraw, consume or discharge water. This is why our targets focus on designing communities that will have low consumption by users, with forecast runoff meeting low impact pollutant loads. To see how we established all of our targets, visit: https://www.landcom.com.au/approach/sustainability/the-journey/ Climate Resilient Places Pillar Overview Energy & Emissions and Water Water Performance Results
303-2 Principles 8 & 9	Management of water discharge-related impacts	
GRI 304: Biodiversity 2016		Location or comment
304-3 Principles 8 & 9	Habitats protected or restored	Climate Resilient Places Pillar Overview Climate & Resilience Climate & Resilience Performance Results Biodiversity
GRI 305: Emissions 2016		Location or comment
305-1 Principles 8 & 9	Direct (Scope 1) GHG emissions	NSW Government Resource Efficiency Policy (GREP)
305-2	Energy indirect (Scope 2) GHG emissions	
305-3	Other indirect (Scope 3) GHG emissions	Landcom's most material Scope 3 emissions will come from the communities we create, once operational. We seek to reduce the future operational GHG emissions of these communities through the adoption of emissions reduction targets. Climate Resilient Places Pillar Overview Greenhouse Gas Emissions Reduction

GRI 405: Diversity and Equal Opportunity 2016		Location or comment
405-1 Principle 6	Diversity of governance bodies and employees	<p>Board Diversity: 50:50 gender balance, all members over the age of 50 years.</p> <p>Executive Diversity: 60:40 male to female ratio, with 87% 30-50 years and 13% over 50 years.</p> <p>Senior Management Contract Diversity: 61:39 male to female ratio, with 74% 30-50 years, and 26% over 50 years.</p> <p>Award Staff Diversity: 43:57 male to female ratio, with 14% under 30 years, 64% 30-50 years, and 22% over 50 years.</p> <p>1% of Award Staff identify as Aboriginal/Torres Strait Islander, with 32% identifying as a Minority Group and 10% with disability.</p> <p>Accountable & Collaborative Places Overview Accountability Performance Results</p>
GRI 408: Child Labour 2016		Location or comment
408-1 Principle 5	Operations and suppliers at significant risk for incidents of child labour	<p>Accountable & Collaborative Places Overview Accountability Performance Results</p>
GRI 409: Forced and Compulsory Labour 2016		Location or comment
409-1 Principle 4	Operations and suppliers at significant risk for incidents of forced or compulsory labour	<p>Accountable & Collaborative Places Overview Accountability Performance Results</p>
GRI 412: Human Rights Assessment 2016		Location or comment
412-1 Principles 1 & 2	Operations that have been subject to human rights reviews or impact assessments	<p>Accountable & Collaborative Places Overview Accountability Performance Results</p>
GRI 413: Local Communities 2016		Location or comment
413-1	Operations with local community engagement, impact assessments, and development programs	<p>Healthy & Inclusive Places Pillar Overview Health, Equity & Inclusion, Community Connection, & Safety Performance Results</p>
413-2	Operations with significant actual and potential negative impacts on local communities	



GRI 415: Public Policy		Location or comment
415-1 Principle 10	Political contributions	<p>As a government organisation Landcom is prohibited from making political contributions.</p> <p>Landcom acknowledges fraud and corruption management is part of good governance and management practice. We provide access to report allegations of possible fraudulent or corrupt conduct via our website, see 'Government conduct, right to information' at https://www.landcom.com.au/faq/#faq-34</p>
GRI 416: Customer Health and Safety		Location or comment
416-1	Assessment of the health and safety impacts of product and service categories	Healthy & Inclusive Places Pillar Overview

Appendix D: Stakeholders

Stakeholders	Consultation method	Topics
State Members of Parliament	Presentations and briefings Site visits and tours	Priorities and coordination Timeframes Program milestones
Federal MPs and agencies, including: Department of Environment & Energy, Department of Foreign Affairs and Trade	Telephone and emails Site visits and tours Presentations and briefings	Environment Protection and Biodiversity Conservation conditions Management of Military Heritage Precinct
State agencies, including: Department of Premier and Cabinet Greater Sydney Commission NSW Treasury Department of Planning, Industry and Environment Office of Environment and Heritage Transport for NSW Roads and Maritime Services Heritage Council Office of Strategic Lands Hunter and Central Coast Development Corporation Trade and Investment Office of the Government Architect Department of Education Property NSW Infrastructure NSW TAFE NSW Utilities	Meetings and briefings Workshops Telephone and emails Seminars Ongoing project liaison including through Multi-Agency Steering Groups, Program Advisory Boards, Program Control Groups and working groups Industry forums Site tours and meetings CEOs Reference Group	Whole of government coordination of investment decisions and delivery Development of plans for precinct Sustainability Strategy development and adoptions Collaboration in accordance with agreed frameworks Access to buildings/land Leases and engagement with tenants Repurposing of heritage buildings Coordinate transport management and infrastructure Specific discussion of projects, components and progress against milestones and objectives Voluntary Planning Agreement and modifications to existing approvals Regional Park embellishment and use Provide service crossings to service land Title production



Stakeholders	Consultation method	Topics
Councillors and local government staff	<p>Meetings, briefings and presentations</p> <p>Telephone, emails and letters</p> <p>Workshops</p> <p>Ongoing project liaison including through Project Coordination, Reference and working groups</p> <p>Asset inspections</p>	<p>Ongoing consultation with Council</p> <p>Coordination with Council projects</p> <p>Statutory planning approvals, including: Development Control Plans, Town centre Development Applications and Voluntary Planning Agreement</p> <p>Coordinate transport management and infrastructure</p> <p>Management of community impacts, placemaking and community development issues</p> <p>Resolve design and delivery issues</p> <p>Negotiate subdivision</p> <p>Council asset handovers</p> <p>Development commencement, progress, access, road closures, street name changes</p> <p>Land acquisition and asset handovers</p>
Local community groups	<p>Meetings and presentations</p> <p>Telephone and emails</p> <p>Ongoing project liaison including through Community Advisory Panels Reference Groups</p> <p>Attendance at Community Group Meetings Ongoing liaison through Reference Groups</p>	<p>Development of plans for precinct</p> <p>Impacts on local infrastructure and properties</p> <p>Opportunities for community input into studies</p> <p>Provision of active recreational facilities</p> <p>Adaptive reuse to secure long term management and ownership</p>
Industry groups and businesses	<p>Presentations/talks at industry events such as business breakfasts, conferences, briefings</p> <p>Advertising</p> <p>Media releases</p> <p>Presentations to industry groups and conferences</p> <p>Presentations at events</p> <p>Meetings and briefings</p> <p>Workshops</p> <p>On site meetings and tours</p> <p>Telephone, emails and letters</p>	<p>Development of plans for precinct</p> <p>Interest in development and other opportunities</p> <p>Impacts on working harbour</p> <p>Impacts on lease arrangements and planning certainty</p> <p>Commercial outcomes</p> <p>Servicing schedule and progress</p> <p>Maintain working relationships</p> <p>Negotiating access for works</p>

Stakeholders	Consultation method	Topics
Department of Education, Catholic Education Office, Schools and Universities	University Collaboration Agreement	Development of plans for precinct
	Landcom's Roundtable and Communities of Practice	Access to teaching materials and project information
	Telephone, emails and letters	Facilitating schools precincts
	Surveys	Maximising shared use of school buildings
	Fieldwork programs	Shared use of open space
	Liaison with school principal	Design, heritage and other aspects of existing spaces
	Ongoing project liaison including through Project Control Group meetings	Access to buildings/land
	Meetings with academics	
Lectures, presentations and tours as part of course		
Indigenous groups	Aboriginal Cultural Heritage Liaison Committee meetings	Coordinate pre-construction activities
		Design of Aboriginal cultural heritage areas
		Other indigenous matters
Media - TV news, radio and newspaper	Interviews	Development and progress of plans for precinct
	Social media updates	
	Ministerial updates	Opportunity to explain balanced outcomes at projects
	Media releases	



Overview

Climate
Resilient Places

Healthy &
Inclusive Places

Productive
Places

Accountable &
Collaborative Places

Appendices

