

A Considered Approach to Developing Our Future



Our Sustainability Journey

We are incredibly mindful of the footprint we leave behind, not just on communities but also on the environment.

As a private developer, we are one of the most advanced in our genuine commitment to sustainability, particularly considering our size and scale.

While we have made a lot of progress over the years, our dedication to push forward and further advance our approach to sustainability is an essential part of our evolution.

Taking important steps to reduce our footprint speaks to our unwavering commitment to Enduring Value.



Meaningful & Measured

Our sustainability journey is about continuing to broaden our focus on every detail of the design and development process.

We are constantly evolving our approach to optimise our properties' environmental efficiencies and minimise the footprint we leave long into the future.

Our approach is authentic, meaningful, and measurable. It is a holistic one that looks at sustainability from a socia economic, and environmental perspective.









Thoughtfully Designed Living

Congratulations on your beautiful new home at Luca by Mosaic.

As part of our commitment to delivering *Enduring Value*, considerable emphasis was placed right from the outset on incorporating the most current and innovative sustainability principles into Luca's design, construction, and ongoing maintenance.

The result is an exemplary collection of homes that look and feel amazing while at the same time being friendlier to the environment and community. We are incredibly proud of Luca by Mosaic; we hope you are too.

This enduring commitment also extends to Mosaic maintaining the management and caretaking of our developments long after completion, so you can rest assured that your home will remain beautifully cared for, for many years to come.

Brook

Brook Monahan
Founder & Managing Director



We actively analysed and deeply assessed every aspect of Luca's design and development, identifying genuine, measurable opportunities to optimise sustainability outcomes.

This ensures we have set the highest standards and delivered the best outcomes for you, and the environment.

We have implemented a wide-ranging, comprehensive schedul of sustainability initiative at Luca by Mosaic, the extent of which far exceeds legislative requirements.



What We Have Delivered



Location Identification

Site Selection

Luca's prime coastal location is fundamental to delivering a sustainable outcome. A contextual and climate responsive design offers residents choice in how they sustainably live and commute. Being within walking proximity to a wide range of urban and lifestyle amenities, including the Musgrave St bus stop at Kirra shops and walking and bike paths, supports Residents in reducing private vehicle use.

Materials Materials	
Low VOC Products (Low emission)	All materials were selected based on having a low Volatile Organic Compound (VOC) rating.
Hazardous Materials	All materials were supplied, handled, and installed in accordance with the highest regulatory standards to ensure a safe and long-lasting outcome.
Alternative Cement Product	Rather than using standard concrete, the primary carbon footprint contributor during a building's construction, we used Australia's first carbon-neutral concrete, produced by Holcim, for Luca. In doing so, we reduced the embodied carbon of ready-mix concrete by 100%.
Recycled Material Use	Wherever possible, recycled materials were used in construction, such as aluminium for window frames and glazing.





Energy

Passive Design	Luca boasts considerable passive design features. This includes a building orientation that balances solar impact with view lines, maximises cross ventilation opportunities through intelligent apartment layouts, elevated ceilings and operable facades, oversized glazed and tinted doors and windows, robust material selection, and slab and wall projections that promote shading and reduce the impact of the external elements to residents.
Rooftop Solar Power Generation	88 solar panels are installed on the rooftop to support energy consumption in common area amenities and reduce the energy requirements on residents and the grid.
High Performance Glazing	Our glazing is manufactured to the highest industry standard using the latest technology. It reduces the impact of external elements, and thereby the need for mechanical cooling and heating systems.
Efficient Cooling & Heating Systems	Mechanical cooling and heating systems were designed to suit each apartment size and type, using energy efficient equipment. Only the most recognised and energy-efficient brands are used.
Sub-Metering & Monitoring	Apartments are sub-metered using smart meters that allow residents the option to monitor in real time their daily consumption of both hot water and electricity.
Efficient Lighting Systems	LED lighting is used almost exclusively throughout the building, significantly reducing energy consumption.
Smart Operating Systems	The use of timers, sensors, and intelligent programming ensures lights are only on when needed in common areas and the car parks.
Efficient Central Hot Water System	Increased insulation was added to all hot water delivery pipes, reducing natural heat loss to apartments and sanitary fixtures. Calculations were also performed to help determine the most energy efficient water heating system.
High Performance Lifts	The energy created from a descending lift is used to power the next ascending lift.

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Water	
Pool Water Evaporation Reduction	Luca's pool is protected from the prevailing winds to reduce evaporation rates.
Efficient Pumps & Filters	Efficient pumps and filters are used in common areas to reduce unnecessary water and energy consumption.
Irrigation Systems	A smart irrigation system monitors weather, soil conditions, evaporation, and plant water use to automatically adjust the garden watering schedule to actual conditions of the site.
Efficient Fixtures & Appliances	The Star energy and WELS ratings are considered when selecting all resident and common area appliances, fixtures, and plant equipment.



Design	
Design Partners	Our partnership with industry-leading design firm Gatehouse Architects has resulted in Luca employing the most current and innovative sustainable architecture principles in its design.
Architecture	Luca's design naturally promotes sustainable outcomes. This can be seen by the building's form, with solid façade elements to the southwest, a ground level that is highly permeable and vegetated, and generous functional resident balconies positioned to the northeast. Due to their solar orientation, all residences enjoy an ideal private indoor/outdoor living experience with open and transparent spaces that maximise natural light and ventilation.
Eco Systems	
Landscape Design	Wide-ranging and generous landscaped areas include deep planting at ground level. In addition, planters up the building assist in improving air quality and micro-climatic cooling.
Species Selection	We were meticulous in sourcing and selecting drought resistant plants suited to the local environment, with a particular focus on curating local native species wherever possible.
Air Quality	
CO Monitoring	CO monitors are installed to the basement in order to observe air-quality and ensure it remains a healthy standard for residents.

Apartment Internal Performance Levels

Apartments are thoughtfully designed, with systems to help ensure optimal air quality and flow, including oversized windows and doors, moisture management to prevent mould, and the use of low VOC and formaldehyde products.



Community	
Engagement	We showed genuine, ongoing respect for the local community by proactively engaging with our neighbours throughout the design, development, and construction process. This was done through on-site signage, and regular letterbox drops and email communication outlining key information and potential disruptions to our surrounding neighbours. Further, a dedicated web page provided an overview of the project and an opportunity for residents to subscribe for updates.
Amenity	Relative to its scale, Luca provides a selection of exclusive on-site resident amenity to help nurture health, well-being, and community.
Education	At handover, a welcome pack is provided to residents with details on how to best engage with the building and their apartment in the most sustainable way.

Waste Management	
Construction Waste Recycling & Reuse	Where possible, construction waste was sent to a licenced recycler or considered for reuse on the site as soil or topsoil.
Waste Management Planning	Waste reduction management was considered during Luca's construction and with the ongoing life of the building.
Separate General & Recycling Bins	Dedicated bins are provided to separate waste on site for recycling.

Transport	
Bicycle Parking	11 secure bicycle parking spaces are provided, comprising 8 for residents on the car park levels and 3 for guests on the ground level. A bike storage room is also located in each apartment.
Walk Score	Luca enjoys excellent walkability to public transport and amenity. It boasts a 200m walk to Kirra Beach, 140m to the Musgrave St bus stop at Kirra shops and 2km to Southern Cross University. There are a range of restaurants, parks, and retail located less than 500m from Luca.





