

# ENVIRONMENTAL ENERGY EFFICIENCY SAVING REPORT

# 1. Water Efficiency

Basix Water Score	40/40 – BASIX Certificate Number 1259834M
Initiatives	<ul> <li>20,000 Litre Central Rainwater Tank for Irrigation &amp; car washing bays</li> <li>Water efficient fittings greater than the 3 Star standard fittings to assist in reducing the water consumption for the building</li> <li>4 star (WELS Scheme) for all toilet flushing system</li> <li>5 star (WELS Scheme) for kitchen and bathroom tapware</li> <li>3 star (WELS Scheme) for shower head</li> </ul>

# 2. Comfort Level and Passive Design

Average NatHERS Star Rating	The proposed residential development will enjoy a high level of thermal comfort gaining an average 6.9 NatHERS star rating
Initiatives	☐□ High-quality glazing system to standard windows
	High-quality Thermally Broken Double-glazing systems in some units to maximise the thermal comfort while enjoying high level of daylighting
	△ At least R1.5 insulation to external walls. The total R-value for the wall system ranges between R2.14 and R2.64
	△ At least R1.0 insulation to suspended floor above basement, carpark and outside-air
	R2.5 insulation to ceiling where required in accordance with the thermal specification for the project
	☐ Maximise use of efficient LED lights/compact fluorescents, and light switches to be located at room exits to encourage switching lights off when leaving a room

# 3. Energy Efficiency

Basix Energy Score	29/25 - BASIX Certificate Number 1259834M
Initiatives	20 kW Renewable PV Solar system for the common area to offset energy requirements from the grid LED energy efficient lighting for all residential units
	☐ Light efficiency measures in the carparks using time clock and motion sensors
	<ul> <li>☐ Single phase EER 3.5-4.0 energy efficient air conditioning systems for the residential apartments</li> <li>☐ Gas cooktop &amp; electric oven</li> </ul>
	△ 3.0 Star Dishwasher
	△ 3.0 Star Clothes Dryer
	△ Central Gas-fired Boiler Hot Water System to reduce energy bill and greenhouse gas emissions

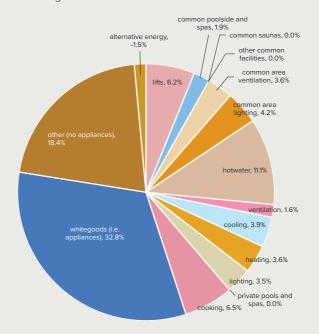
# 4. Energy and Water Saving

Energy and Water efficiency of any building is determined not only by the design but also by the energy consumption requirements and practices of the occupants. The data in the current report should not be used for legal and any other purposes.

## Energy

#### **Energy Saving**

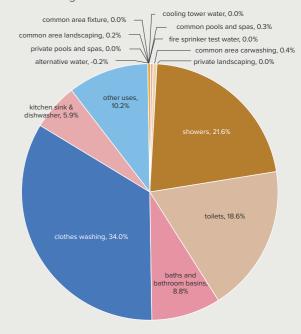
- △ Achived Score 29 (Target Score: 25)
- ☐☐ Total KgCo2 against pre-BASIX Building Energy Saving is 662,732 per annum
- ☐☐ The percentage contribution to Energy score is shown in below figure



#### Water

#### Water Saving

- Achieved Score 40 (Target Score: 40)
- Total Building Water Saving against pre-BASIX Building is 29,096 kL per annum
- ☐ The percentage contribution to Water score is shown in below figure



## 5. Transport

Transport emissions are one of the largest contributors of greenhouse gas emissions in Australia. The Green Building Council of Australia (GBCA) encourages the utilisation of alternative and mass transit forms of transport by limiting the availability of private vehicle spaces.

## **Commuting Using Public Transport**

The building is located close to multiple public transport options. The public bus stops are in front of the Eastgardens shopping centre, which are the major bus arterial routes connecting the local suburbs to Sydney CBD. Bus stops are located on Tingwell Boulevard, Banks Avenue and Bunnerong Road, bus services include 301, 310, 316, 353 and 391 etc, which are connecting Eastgardens shopping centre to Bondi Junction via Randwick Junction, and to City – Circular Quay via Surry Hills etc. Service frequency ranges from every 15 to every 60 minutes throughout the day in both directions of travel. The project site will therefore encourage residents to use public transportation and minimise automobile use

#### **Non-Motorised Transport**

256 Bicycle Spaces have been provided to help minimising the requirement for individual motorized transport

#### Low Emission Vehicle Infrastructure

498 Parking Spaces with provisions for EV charging, and 26 bike charging stations to support the uptake of low emission vehicles

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