

# SUSTAINABILITY MANAGEMENT

## CREATING VALUE AND ALIGNMENT TO UN SUSTAINABLE DEVELOPMENT GOALS (SDGS)

In alignment with CapitaLand, CMT referenced the Guiding Principles of the International Integrated Reporting Council (IIRC) Framework and group our material ESG issues into six Capitals.

The Capitals are mapped against some of CMT's main efforts and programmes in relation to the key UN SDGs. The UN SDGs call on companies to advance sustainable development through the investments they make, solutions they develop, and business practices they adopt. The goals encourage companies to reduce their negative impacts while enhancing their positive contribution to the sustainable development agenda.

Capitals	Material Issues	What we do	2019 Value Created
<b>Financial</b> <ul style="list-style-type: none"> <li>Earnings</li> <li>Equity</li> <li>Investments</li> <li>Assets</li> </ul>		<ul style="list-style-type: none"> <li>Combination of operating income from investment properties, disciplined approach to investments as well as proactive portfolio and capital management</li> <li>Execute portfolio reconstitution strategy to create value</li> </ul>	<ul style="list-style-type: none"> <li>Refer to Financial Highlights on page 8 to 9</li> </ul>
<b>Organisational</b> <ul style="list-style-type: none"> <li>Leadership &amp; culture</li> <li>Corporate governance</li> <li>Risk management</li> </ul>	<ul style="list-style-type: none"> <li>Compliance</li> <li>Business ethics</li> <li>Stakeholder engagement</li> </ul>	<ul style="list-style-type: none"> <li>CapitaLand is a signatory to the UN Global Compact. As part of CapitaLand, CMT has implemented key efforts and programmes in relation to the key UN Sustainable Development Goals</li> <li>CMT is aligned with CapitaLand's Supply Chain Code of Conduct which influences its supply chain to operate responsibly in the areas of anti-corruption, human rights, health and safety, as well as environmental management</li> <li>All employees are required to make an annual declaration to uphold CapitaLand's core values and not to engage in any corrupt or unethical practices</li> <li>Requires certain of its agreements with third-party service providers and vendors to incorporate anti-bribery and anti-corruption provisions</li> <li>Requires main contractors to ensure no child labour and forced labour at project sites</li> </ul>	<ul style="list-style-type: none"> <li>Refer to Corporate Governance on page 32 to 63</li> <li>No reported incident relating to discrimination, child labour or forced labour in CMT</li> </ul>
<b>SDG 16</b>			
<b>Environmental</b> <ul style="list-style-type: none"> <li>Carbon emissions</li> <li>Energy management</li> <li>Water stewardship</li> <li>Waste and resource management</li> </ul>	<ul style="list-style-type: none"> <li>Energy efficiency</li> <li>Climate change and emissions reduction</li> <li>Water management</li> </ul>	CMT is aligned with CapitaLand's commitment to: <ul style="list-style-type: none"> <li>Reduce water consumption, reuse water and prevent water pollution</li> <li>Reduce energy consumption through improved energy efficiency and encourage use of renewable energy.</li> <li>Green its operational portfolio by 2030</li> <li>Actively embrace innovation to ensure commercial viability without compromising the environment for future generations.</li> <li>Future-proof its developments by addressing the risks of climate change right from the design stage</li> <li>Preserve the biodiversity of its sites and the wider area where possible.</li> <li>Build safe, accessible, vibrant and quality real estate developments to enhance the lives of its shoppers, tenants and members of the community</li> </ul>	<ul style="list-style-type: none"> <li>Reduced energy intensity by 24.5%</li> <li>Reduced carbon emission intensity by 43.1%</li> <li>Reduced water intensity by 20.0%</li> <li>Achieved Green Mark certification for all CMT properties. Out of the 15 properties, 14 are certified Green Mark Gold and above</li> </ul>
<b>Manufactured</b> <ul style="list-style-type: none"> <li>Environmentally sustainable, healthy, safe and accessible quality buildings</li> <li>Innovative and sustainable construction methods and technologies</li> </ul>	<ul style="list-style-type: none"> <li>Building materials</li> <li>Construction and operational waste</li> <li>Biodiversity</li> <li>Stakeholder engagement</li> </ul>		
<b>SDG 3, 6, 7, 9, 11, 13, 15</b>			

## ENVIRONMENTAL CAPITAL

CMT is committed to environmental sustainability and value creation as a real estate owner. By leveraging technologies and analytics in optimising the usage of energy, water and waste management across our properties, we believe that we can manage our business more efficiently and create long-term value for all stakeholders.

We continually keep abreast of developments in our industry and engage our stakeholders. We cultivate our stakeholder relationships through regular and systematically planned forms of dialogue such as conferences, workshops, roadshows and surveys.

### Managing Our Environmental Footprint

CapitaLand's Environmental Management System (EMS) is a key tool in managing CMT's environmental footprint across its entire portfolio. The EMS, together with CapitaLand's Occupational Health and Safety Management System (OHSMS) are integrated as CapitaLand's Environmental, Health and Safety Management System (EHSMS) that complies with ISO 14001 and OHSAS 18001 standards. ISO 14001 and OHSAS 18001 are internationally recognised standards for environmental management and occupational health and safety management of businesses respectively.

### Environmental, Health and Safety Policy

CMT is committed to protecting the environment and upholding the occupational health and safety (OHS) of everyone in the workplace. We dutifully:

- Carry out exemplary EHS practices to minimise pollution as well as health and safety risks
- Seek continual improvement on its EHS performance
- Comply with relevant legislations and other requirements
- Implement CapitaLand's Sustainable Building Guidelines (SBG) and OHS programmes

This policy is readily available to all employees, tenants, suppliers and service providers. Since 2012, all business functions such as property management and property development for CMT's properties are EHS certified.

### Risk Management of Environmental Aspects and Impacts

As part of the certified EMS, new or updated legal requirements are reviewed quarterly and compliance is evaluated annually.

CapitaLand's EMS provides a systematic process to manage environmental impact and to continuously improve its environmental performance. A key element is to identify and manage significant environmental aspects of its business operations that can potentially have a negative impact on the environment. The significance level of each environmental aspect and impact is assessed using a risk assessment technique based on factors comprising the likelihood of the occurrence, severity of the impact and control measures implemented.

CMT strives to minimise environmental impact in areas such as resource depletion, carbon emissions and waste generation. This is done by setting environmental targets such as green building rating targets, carbon emissions, energy and water usage reduction targets, participating in stakeholder engagement activities, as well as implementing various measures to achieve them.

### Training

To facilitate effective implementation of CapitaLand's EHSMS, training and awareness programmes are planned and conducted for all employees. New employees are introduced to the EHSMS and EHS policies and briefed on their roles. Heads of Departments in administration, operations, and project management including heads of operating properties, design managers and project managers undergo more detailed training.

### Internal and External Audits

CapitaLand has in place an internal audit system to ensure the conformance and effective implementation of its EMS to ISO 14001 international standards. External audits are conducted annually by a third-party accredited certification body.

# SUSTAINABILITY MANAGEMENT

## Sustainable Developments and Assets

BCA Green Mark certifications affirm the quality of CMT's properties. These ratings serve as an external validation that key environmental aspects have been considered in CMT's project design, development and operations.

### Green Building Rating

Green building rating targets are set from the early stage of design and development. Green buildings have a lower lifecycle carbon footprint through the adoption of sustainable design and materials and are more resource efficient.

The minimum target certification for our new development is BCA Green Mark Gold<sup>PLUS</sup>. In support of the Singapore Government's Green Building Master Plan, CMT is committed to achieving BCA Green Mark certification for all properties by 2020. Ahead of our target, all CMT's properties are BCA Green Mark certified as at 31 December 2019.

Property	Award Category
Westgate	Platinum
Bedok Mall	Platinum
Bugis Junction	Platinum
Bugis+	Platinum
Junction 8	Platinum
JCube	Platinum
IMM Building	Gold <sup>PLUS</sup>
Funan	Gold <sup>PLUS</sup>
Bukit Panjang Plaza	Gold <sup>PLUS</sup>
Raffles City Singapore	Gold <sup>PLUS</sup>
The Atrium@Orchard	Gold
Tampines Mall	Gold
Lot One Shoppers' Mall	Gold
Plaza Singapura	Gold
Clarke Quay	Certified

## Life Cycle Management

CapitaLand's SBG is an in-house guide developed to ensure environmental considerations are factored in at all stages of a project from feasibility study, design, procurement, construction to operations.

### Mitigating Climate Change Challenges and Identifying Opportunities through Design

As countries rally for action to mitigate climate change, more stringent regulations may be expected and companies will face increased expectations from stakeholders. By adopting the SBG, CMT aims to future-proof its developments by addressing the risks of climate change right from the design stage.

Every project is studied in detail and appropriate measures are adopted in consideration of climate change. The SBG also sets guidelines for buildings to be less energy reliant, for example, setting green building certification targets above statutory requirements, as well as encouraging the use of renewable energy, whenever possible.

The SBG is regularly reviewed to ensure continuous improvement, with a focus on four key objectives of minimising carbon footprint and energy consumption, water management, waste management and promoting biodiversity in the life cycle of its developments.

Enhancements since inception include higher green building certification requirements, use of certified wood and design for accessibility.

### Environmental Impact Assessment

A key component of the SBG is the mandatory Environmental Impact Assessment (EIA). An EIA is carried out during the feasibility stage of a development project. Significant findings of the EIA and their cost implications, if any, are incorporated in the investment paper and submitted to the Board of Directors for approval.

The EIA focuses on identifying any environmental threats or opportunities related to the project site and its surroundings, covering areas such as floods, biodiversity, air quality, noise, connectivity, heritage and resources.

### Our Environmental Commitments

Leveraging CapitaLand's Environmental Tracking System (ETS), we track energy and water usage, waste collection and disposal, as well as carbon emissions at our operating properties.

The management team of each property submits monthly data and uploads supporting documentation into the ETS. The data is analysed to facilitate a better understanding of consumption patterns and identify areas for eco-efficiency improvements.

CMT continues to implement various energy conservation measures which focuses on innovation to reduce energy consumption. The measures are listed in the table below.

Focus	Measures
Central Air Conditioning System	<ul style="list-style-type: none"> <li>• Installed with Measurement &amp; Verification (M&amp;V) System to monitor system performance daily</li> <li>• Perform preventive and periodic servicing and maintenance</li> <li>• Auto tube-cleaning system</li> <li>• Conduct energy audit periodically</li> </ul>
Lighting	<ul style="list-style-type: none"> <li>• Replacing existing non-LED type with LED type</li> <li>• Lighting power budget of not more than 22 Watts per m<sup>2</sup> for tenanted areas</li> </ul>
Control, Metering and Monitoring	<ul style="list-style-type: none"> <li>• Building Management System</li> <li>• Sub-metering</li> </ul>
Renewable Energy	<ul style="list-style-type: none"> <li>• Photovoltaic (PV) system</li> </ul>
Equipment	<ul style="list-style-type: none"> <li>• Replace equipment with higher efficiencies</li> </ul>

Aligned with CapitaLand's long-term targets for the reduction of carbon emission, energy and water, CMT's environmental commitments are as follows:

**Long-term targets (using 2008 as base year):**

- Reduce energy intensity of 20.0% by 2020, and 25.0% by 2030
- Reduce carbon emissions intensity by 23.0% by 2020, and 30.0% by 2030
- Reduce water intensity of 20.0% by 2020, and 30.0% by 2030

For 2020, CMT aims to maintain or reduce energy intensity, water intensity and carbon emission intensity compared to 2019.

**Energy**

In 2019, CMT reduced energy intensity measured in kilowatts-hour per square metre (kWh/m<sup>2</sup>) by 24.5% from base year 2008. Energy usage for operating properties was approximately 133,445 MWh compared to 130,521<sup>1</sup> MWh in 2018. The increase was due to the commencement of operations at Funan from 28 June 2019. CMT is on track to achieving its 2030 energy intensity reduction target.

In support of the annual Earth Hour campaign on 30 March 2019, all non-essential lights were turned off at CMT's properties.

**Carbon Emissions**

CMT is committed to address climate change risks through the reduction of its energy consumption. Improving energy efficiency represents the largest and most cost-effective way to mitigate those emissions.

In 2019, CMT's carbon emissions was approximately 52,932 tonnes. Emission intensity was 6.16 kgCO<sub>2</sub>e/m<sup>2</sup> in 2019. The improvement represented a 43.1% reduction in carbon emission intensity compared to 2008.

Most of CMT's properties are located close to or integrated with mass rapid transit (MRT) stations and bus interchanges. This allows easy access to the surrounding communities and facilities via walkways which are mostly sheltered. In addition, to reduce carbon emissions, CMT's properties are provided with bicycle lots to encourage shoppers and tenants to use greener modes of transport. There are about 589 bicycle lots across the CMT's properties.

In 2019, we partnered with BlueSg on electric car sharing at five of our malls, namely Plaza Singapura, Lot One Shoppers' Mall (Lot One), Tampines Mall, Funan and Clarke Quay. We plan to roll out to two other malls in 2020. Additionally, CMT has more than 1,400 sq m of solar panels at Bugis Junction, JCube and Bedok Mall. These solar panels have helped our malls to tap 75,790 kWh of renewable energy source.

1 2018 data has been restated.

## SUSTAINABILITY MANAGEMENT

### Water

CMT is committed to reducing water usage and preventing water pollution. Water usage and discharge for each property are monitored and checked regularly. In 2019, CMT's water usage was approximately 1.5 million m<sup>3</sup>. This included approximately 0.5 million m<sup>3</sup> of NEWater. Water intensity was reduced by 20.0% compared to 2008. The decline was attributed to the remote monitoring of water usage across all properties. This allows us to identify and respond promptly to exceptions such as leakages and ad hoc operations in an effective manner.

### Waste

Collection and disposal of waste at all CMT's properties are carried out by National Environment Agency licensed contractors. In 2019, we collected 23,760 tonnes of non-renewable waste, a reduction of 3.0% compared to a year ago. More than 93.0% of recycled waste collected comprised paper with the rest made up of metal, plastic, glass and others.

CMT aims to manage waste at its properties responsibly. As waste generated at its properties is mostly from tenants, we engage our stakeholders through various means to minimise and recycle waste. Recycling bins are made available at all CMT's properties.

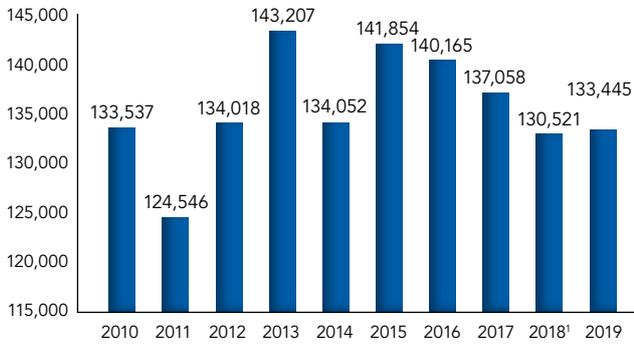
Since embarking on our waste recycling journey in 2008, we have extended our waste recycling efforts

to e-waste. CapitaLand has been partnering StarHub to roll out e-waste recycling bins at CMT's properties to encourage shoppers and tenants to adopt e-waste recycling and address the increasing environmental and health concerns posed by improper handling of e-waste. The participating malls include Bugis+, Bedok Mall, IMM Building (IMM), JCube, Junction 8, Lot One, Plaza Singapura, Raffles City Singapore and Tampines Mall. In 2019, the total e-waste collected was 13.6 tonnes.

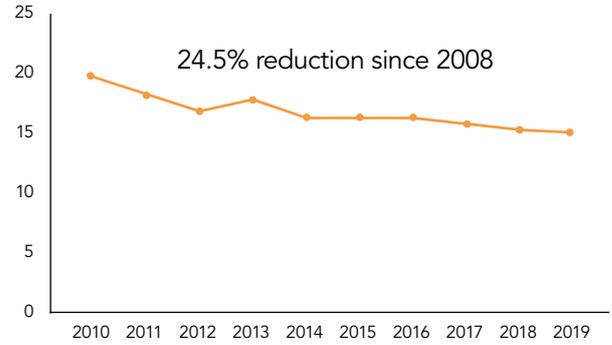
As an ongoing sustainability effort, CMT has been partnering tenants in six of its malls to collect coffee waste for each building's landscape vendor to recycle as a plant fertiliser. The six malls include Bugis+, IMM, Junction 8, Lot One, Tampines Mall and Westgate. A separate bin is provided at each mall for the collection of coffee waste. Depending on the volume, the landscape vendor collects the coffee waste from the recycling bin either weekly or bi-weekly. The total amount of coffee waste collected is up to 180 litres weekly.

CMT requires its main contractors to implement proper waste management procedures on site to minimise, manage and dispose construction waste efficiently. We continue to leverage Building Information Modelling (BIM) technology to improve the design and construction process through more integrated project coordination. BIM performs clash detection before construction commences. It identifies situations where mechanical and electrical services clash with structural members. Early detection saves time and cost of remedial work and minimises material wastage.

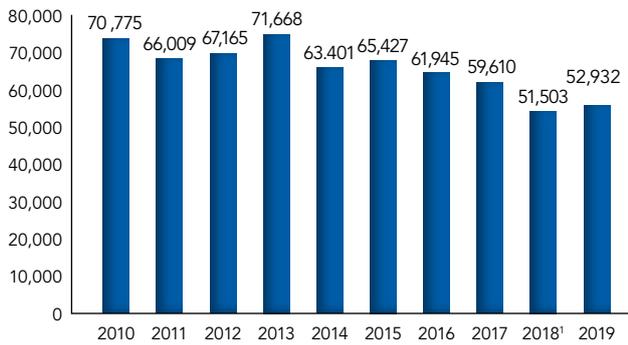
### Energy Usage (MWh)



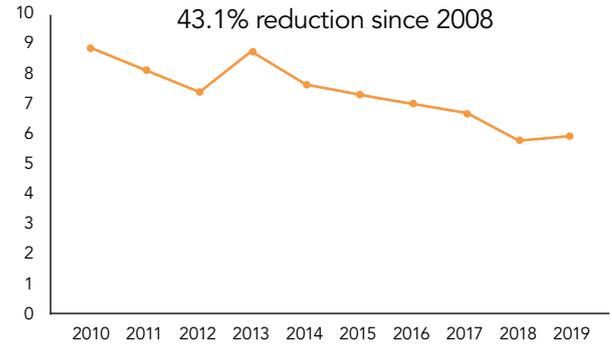
### Energy Intensity (kWh/m<sup>2</sup>/month)



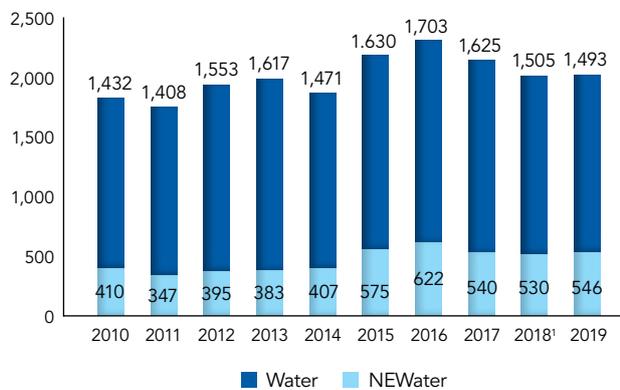
### Carbon Emissions (tonnes CO<sub>2</sub>e)



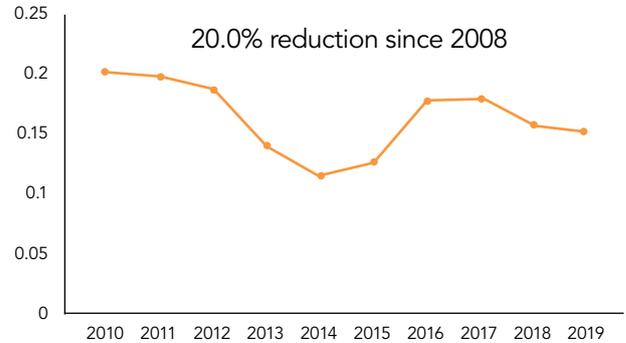
### Carbon Intensity (kgCO<sub>2</sub>e/m<sup>2</sup>/month)



### Water Usage (thousand m<sup>3</sup>)



### Water Intensity (m<sup>3</sup>/m<sup>2</sup>/month)



<sup>1</sup> 2018 data has been restated.

# SUSTAINABILITY MANAGEMENT

## FUNAN – LEVERAGING TECHNOLOGY. DRIVING SUSTAINABILITY

*Mr Tony Tan, CEO of CapitaLand Mall Trust Management Limited, said: "Conscious of the evolution of retail, we embarked on the redevelopment of Funan in 2016 even though the mall was still delivering healthy returns at that time. We are heartened that the reimagined Funan has been well-received by our retailers, office tenants and shoppers. A well-located asset with strong brand recognition, we are committed in ensuring that Funan remains an attractive shopping and lifestyle destination that continues to win customers with differentiated experiences not replicable online. As Singapore's largest retail real estate investment trust, CapitaLand Mall Trust will continue to identify areas for reinvention that will serve the needs of present and future generations of shoppers."*

Funan was uniquely conceptualised as an integrated development comprising retail, office and coliving spaces in a creative and sustainable environment. Underpinned by a digital layer of customer experience as well as green building and universal design principals, the reimagined Funan reopened on 28 June 2019 as a social retail space for discovering, learning and shopping.

### Design and Construction

From design to construction, the redevelopment process was centred on the Virtual Design and Construction approach to achieve enhanced productivity. Using a top-down construction method, Funan's basement and superstructure were built concurrently. Pre-cast concrete was used for structural components to improve construction efficiency. From groundbreaking to completion, the rapid redevelopment took 27 months despite its scale. Recognised for its sustainable design features and friendly built environments, Funan was conferred the BCA Green Mark Gold<sup>PLUS</sup> award and the BCA Universal Design Mark Gold<sup>PLUS</sup> (Design). In addition, Funan was recognised for its architectural and design excellence with the Interior Design Awards 2019 at the BCI Asia Awards 2019. It was also conferred the Mixed-use Architecture (Singapore) award at the Asia Pacific Property Award 2018-2019, and the Best Mixed-use Development Bronze award at the MIPIM Asia Awards 2019.

### Energy and Water Efficiencies

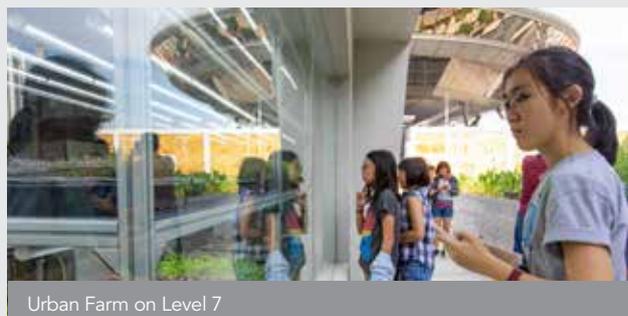
Funan integrates technology and new innovations to minimise energy and water consumption. Design features include an energy efficient facade that minimises solar heat transmission, as well as a seven-storey green wall irrigated by harvested rainwater. With its innovative water fittings and indigenous plants,

Funan is expected to be able to save approximately 12.8 million litres of water per year.

Within the development, the retail common areas and office lobbies as well as the coliving front of house are fully fitted with energy efficient LED lights. These lights are controlled by an intelligent scene control system, which adjusts the luminosity of the LEDs according to the brightness of the environment. Funan also uses regenerative lifts, which can deliver up to 18% of energy savings compared to non-regenerative lifts.

Funan's energy efficient water-cooled chilled water plant system is able to achieve 0.557 kW/rton weighted plant efficiency in one day. It is the first retail mall in Singapore to use a next-gen refrigerant (R1233zd) to minimise energy consumption and reduce greenhouse gas emission. Energy can be conserved by varying the variable speed drives of Funan's chilled water distribution pumps, condenser water pumps and cooling towers. An auto-cleaning feature for the condenser tube ensures that the chiller plant delivers optimal performance.

Funan estimates energy savings of approximately 6,447,787 kWh per year, equivalent to approximately 3,224 tonnes of carbon emissions reduced per year.



### Social Integration and Community Engagement

As an open and inviting space for visitors to shop and engage in lifestyle activities, Funan offers plenty of green spaces, rest areas and interactive corners that encourage discovery and novel community experiences. To promote community health and well-being, Funan's 18,000 sq ft food garden and 5,000 sq ft urban farm are the largest roof-top garden and urban farm in the city. These spaces allow visitors to learn how vegetables are produced and harvested, while the organic produce is served up at Noka, Spa Esprit's first Japanese restaurant, which is next to the urban farm. Funan also features a prominent sports cluster, with a premium fitness club equipped with a 25-metre swimming pool, the largest indoor rock-climbing facility in the CBD and a futsal court.



The ARK Futsal on Level 7

In a nod to the nation's car-lite movement and to serve the office community in and around Funan who cycles to work, Funan has a dedicated Bicycle Hub of over 170 bicycle bays with end-of-trip amenities. Fast-charge stations for electric vehicles and electric bicycles are also available at the mall. To further enhance accessibility to the mall, an underground linkway will be ready by 2021 to connect visitors from City Hall MRT station.

Anchored by its six passion themes – Tech, Craft, Play, Fit, Chic and Taste – Funan has brought together like-minded communities. From climbers, cyclists and yogis to gardeners, bakers and techies, Funan has become a stomping ground for numerous interest groups. Bike enthusiasts regularly flag off community rides from the Brompton Junction flagship store in Funan. The Green Collective's plant swap has seen lively engagement among gardeners who traded herbs, flowers and tips on home gardening. Hobbyists and fitness enthusiasts such as the "Superhero Runners", a group of around 60

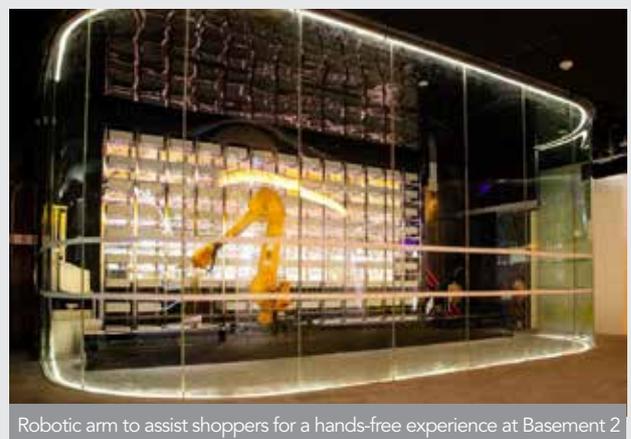
runners, have chosen Funan to meet and kickstart their weekly jogs around the city.

With a dedicated Community Manager, Funan will be able to continue curating community experiences, as well as building social connections and networks beyond the transactional.

### Stakeholder Engagement and Retail Experience

Embedded with an eco-system of sensors and analytical tools, Funan is able to create a digital layer of customer experience through deeper consumer insights. Tenants are also empowered to incorporate digital innovations to enrich the in-store experience. The majestic design centrepiece of Funan, the Tree of Life, houses 20 retail pods that can host creative retailing formats and experiential offerings. The Tree of Life offers flexible leases to new and/or online retailers to testbed their products and services.

Providing added convenience for shoppers, Funan's 40 smart directories can map the shortest route to their desired store and make recommendations based on their demographic profiles. Leveraging technology to unlock even more convenience for shoppers, the trials for an innovative robot-enabled hands-free shopping service commenced in 1Q 2020. Retailers can leave packages for customers at the collection point at Basement 2, where a robotic arm is stationed to place the packages into their respective boxes and retrieve them when activated. Shoppers who drive can pick up their packages 24/7 via a drive-through collection point.



Robotic arm to assist shoppers for a hands-free experience at Basement 2