

Pushing the Boundaries for a Greener and More Liveable City

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Dr Cheong Koon Hean, Chief Executive Officer of the Housing & Development Board, has long been an advocate of the use of greenery to create a highly liveable city in land-scarce Singapore. An architect and urban planner, Dr Cheong has steadily pushed the boundaries in shaping a greener and more sustainable living environment.

As CEO of the Urban Redevelopment Authority from 2004 to 2010, she spearheaded the development of Marina Bay, systematically and meticulously transforming it from a tract of empty reclaimed land into the new business and financial district that is today a globally recognised, bustling live-work-play destination. Among the area's top attractions is the Gardens by the Bay, built on 100 hectares of precious real estate set aside by the planners to create an urban oasis in the heart of the city.

Since taking over the reins of HDB in mid-2010, Dr Cheong has set in motion a Roadmap to Better Living in HDB Towns – a blueprint launched in 2011 to steer the development of well-designed, sustainable and community-centric towns. Today, the Roadmap has guided the creation of a new generation of public housing which encompasses modern city living that is supported by a wide range of facilities, and abundant green spaces for rest, relaxation, and community bonding. In 2014, Dr Cheong also led HDB in introducing the Smart HDB Town Framework, which guides the application of smart technology to make HDB towns and estates more liveable, efficient, sustainable and safe.

A New Generation of Green, Sustainable & Smart Homes



HDB's new generation housing is proof that good, sustainable design is achievable even when building mass housing to a budget. Homes that are innovative, functional and aesthetically-pleasing are evident in projects like Waterway Terraces and Waterway Ridges, where high-rise blocks have been designed to maximize views of their picturesque waterfront location along the 4.2 km MyWaterway @ Punggol. At SkyTerrace @ Dawson and SkyVille @ Dawson, which line the Alexandra Canal Linear Park, greenery links the housing projects together seamlessly, while sky gardens encourage high-rise mingling.

Similar concepts and ideas are being implemented in other towns and estates, including Bidadari, which has been planned with its rich heritage and unique rolling greens topography in mind. Envisioned to be a community in a garden, where residents can relax and connect with family and friends in a garden-like setting, a key feature of the estate is the transformation of the existing Upper Aljunied Road into a new Bidadari Heritage Walk. Lined with a canopy of mature trees, the 700-metre Heritage Walk will stitch the future Alkaff Lake with the Bidadari Park, creating a contiguous and conducive park land within Bidadari for residents to walk and cycle safely around the estate.

Pushing the envelope further is Tengah, the latest HDB town launched in September 2016. Planned to be integrated with the area's surrounding greenery and biodiversity, it will be Singapore's first "Forest Town". At the heart of the plans is the creation of a 100 metre-wide and 5 km-long forest corridor, which will form part of the larger network of greenery that connects the Western Water Catchment Area and the Central Catchment Nature Reserve. A collaboration with National Parks Board, this forest corridor will be planted with rainforest tree species to transform it into a rich forest habitat. Amenities such as hiking trails will be incorporated in the corridor for the community to get close to nature and enjoy the rainforest.

Tengah will also see Singapore's first car-free town centre, offering a greener, car-lite, people-friendly and pedestrian-friendly environment. All the roads in Tengah will come with dedicated walking and cycling paths on both sides, to enable residents to enjoy seamless and safe connections for walking and cycling.


Beyond green living, Tengah will also be the first town to apply smart technologies town-wide, taking the application of smart technology beyond the trials conducted in Punggol and Yuhua. For instance, the use of 3D city models to simulate the interaction of urban microclimatic conditions such as wind flow, temperature fluctuations, and solar irradiance with each other, as well as their combined effects on the surrounding urban landscape, will enable HDB to design open spaces and optimise building layouts to enhance wind flow for maximum thermal comfort.

Planning with People at the Heart

Greenery and technology aside, Dr Cheong is also a firm believer in the concept of place-making, and the importance of creating spaces that people would enjoy using. She says, "We need to pay more attention to public spaces, and how to activate them so that people will be drawn to congregate there. Place-making and place management are about understanding how people use a place. We must never forget the people."

Indeed, the sum of these plans and efforts forms part of what Dr Cheong sees as a winning formula to make people fall in love with their environment – to see it as a place to call home, a place to create memories and a future together.

The impact of Dr Cheong's contributions in transforming Singapore into one of the most liveable cities in Asia, has earned her both the prestigious Urban Land Institute (ULI) J.C. Nichols Prize for Visionaries in Urban Development, and the Lynn S. Beedle Lifetime Achievement Award by the Council on Tall Buildings and Urban Habitat (CTBUH) in 2016. Dr Cheong is the first in the world to receive both prestigious prizes in the same year.

But Dr Cheong is quick to give credit to her colleagues whom she has worked with over the years. Likening urban planning to an orchestra, she says, "Planning is never about a single person, but many people coming together and having a vision to deliver a very good product. It is like the creation of a beautiful symphony where the conductor and very passionate musicians – the government agencies, planners, architects and developers – work together and are aligned in their vision to create a harmonious piece of music." 

1. Abundant greenery and nature will be weaved throughout Tengah, making it a main distinguishing feature of the "forest town".

2. Dr Cheong Koon Hean has played a pivotal role in shaping Singapore's urban and public housing landscape.