



Creating Liveable Industrial Districts

by Alvin Chua



"It's easy to develop a single building, or a couple of buildings. But it's more challenging to develop a district of buildings, because your considerations are different. You're looking at a district level — how buildings interact, how people move needs to be considered.

As a master developer, you need to take care of that. You have to look at how you bring people, be it by public or private transport, into the district. The form and shape of buildings has to be considered, and the urban design factors come in differently. It's the whole value chain from master planning to design to construction to facilities management. That's a challenge in itself."

Staying agile and attuned to innovation is crucial for industrial developers like the Jurong Town Corporation (JTC) in an age of disruption, said JTC Assistant CEO David Tan at the CLC Lecture on Urban Innovations in the City II.

Beyond traditional roles as infrastructure providers, industrial developers now have to help companies transform and stay competitive in the face of challenges such as changes in the economy and workforce, environmental and sustainability considerations as well as disruptive technology and business models.

"The new value [of JTC] is that we will provide flexible spaces for everyone. We're not only focused on multinational corporations or small to mediumsized enterprises or start-ups, but for everybody, so that we can come together in a fully integrated district," said Tan. "Hopefully, this will help grow our economy, provide good jobs for our people and good conducive working environments."



JTC developments foster industry-

academia collaboration, accommodate start-ups and nurture new industries such as advanced manufacturing and cybersecurity. Tan also pointed to JTC strategies such as transitioning from generic industrial spaces to industry clustering, innovative building solutions and shared facilities.

The creation of integrated ecosystems such as one-north and the future Jurong Innovation District brings with it both challenges and opportunities.

"We want to develop our districts and our buildings to be not only sustainable, but also liveable. How do we integrate various uses such as offices, R&D, residential, open community space, clean industries, and still maintain the necessary environment?

"How do we create a smart district that focuses on various issues like smart parking, waste management, intelligent street lighting and smart metering? The key is to develop the smartness so that you can get good public feedback and continuously improve the facilities," said Tan.

Community-building, not traditionally considered within the purview of industrial developers, is now factored in as well. "How do you build intellectual and social vibrancy? How do you build a community, so that people can come together, interact and collaborate?

"The key thing is when you design your buildings, you must design them with place-making in mind. There must be spaces that are exciting for people to come together, exchange ideas and hopefully innovate," said Tan.

Mixed use districts can also bring about competitive advantages. "There are estate-level utilities and services such as district cooling systems and pneumatic waste collection that reduce business costs and help companies become more competitive," he added.

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About the Speakers



SPEAKER

Mr David Tan

Assistant Chief Executive Officer, JTC Corporation

David oversees the land planning, redevelopment of land, procurement and contract management, as well as the master planning and development of JTC's next generation estates and developments like one-north and Jurong Innovation District. He has over two decades of professional experience in a multitude of areas from leadership & management, engineering & innovation to industry development; having been involved in the planning, design, construction and project management of major infrastructure, building and reclamation projects. He was involved in the development of the Jurong Island as the world's top ten chemical and energy hub and the development of Jurong Rock Caverns, South East Asia's first underground liquid hydrocarbon storage and terminalling facility, located some 150m beneath Banyan Basin.



MODERATOR

Mr Tan Szue Hann

Head, Sustainability, Surbana Jurong Pte Ltd

Tan is Head of Sustainability at Surbana Jurong, and is also Singapore's 2015-16 Building Construction Authority -Singapore Green Building Council Young Green Architect (BCASGBC) of the Year. He is a Registered Architect with the Board of Architects, and a Council Member of the Singapore Institute of Architects, chairing the Sustainability Committee. He is also a Board Member at the SGBC. In 2016, he was nominated as a World Cities Summit Young Leader.

About CLC

The Centre for Liveable Cities was set up in 2008 by the Ministry of National Development and the Ministry of the Environment and Water Resources, based on a strategic blueprint developed by Singapore's Inter-Ministerial Committee on Sustainable Development. Guided by its mission to distil, create and share knowledge on liveable and sustainable cities, the Centre's work spans four main areas - Research, Capability Development, Knowledge Platforms and Advisory. The CLC Lecture Series is a platform for urban experts to share their knowledge with other practitioners. For more information, please visit us at http://www.clc.gov.sg

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