

NUS Real Estate Public Lecture 2018

This Lecture forms part of a series of Public Lectures organized by NUS Real Estate. These Lectures serve as platforms for industry leaders and subject matter experts in the academia to come together to share insights and perspectives. Aside from the dissemination of knowledge, such forums also provide common interaction spaces that facilitate the cross fertilization of ideas and encourage the development of applicable and industry-relevant tools that can help guide and improve decision making and strategic planning outcomes.

Sustainability Trends Driving the Future of Real Estate

Date/Time: 31st August 2018, 12pm – 1.30pm
Venue: Shaw Foundation Alumni House Auditorium

Climate change presents one of the greatest challenges today affecting Singapore and the international community, rallying countries worldwide to take action. With Real Estate accounting for around 40% of energy use globally, what are some of the key sustainability trends that will shape the future of this sector? This presentation will explore how technological developments are revolutionising the way we plan and build our cities, our buildings and the underlying shifts towards higher green performance as the only way forward.

Speaker:



Mr. Tan Swee Yiow

Mr. Tan is currently the Chief Executive Officer and Executive Director of Keppel REIT Management Limited. He is also the President of Singapore Green Building Council and a founding member of World Green Building Council's Corporate Advisory Board. He was recently appointed to the World Green Building Council Board on 1st July. Mr. Tan also serves as Deputy Chairman of the Workplace Safety and Health Council (Construction and Landscape Committee) and is the Honorary Treasurer on the Management Council of Real Estate Developers' Association of Singapore. [Read more ...](#)

Key Messages



A. Current Environmental Issues Facing Singapore

▪ Rapid Urbanisation

There is an increasing level of urbanisation, occurring at an increasing rate. The UN estimates that by 2050, 70% of the world's population will live in cities. This is a major issue as cities are the largest consumers of natural resources.

- **Waste Disposal**
Waste disposal is quickly becoming a hot topic issue. Households in Singapore are consuming at an increasing rate. Singapore only has one landfill island, Pulau Semakau, and it is expected to reach its capacity by 2035.

B. Solutions to Environmental Issues

- **City Level**
At the city level, there can be large scale systems designed to improve resource consumption through efficiencies of scale. As an example, in Tianjin eco-city, the land in which the site was developed, was salt-land that was initially thought to be of little value.



- **Township Level**
Smart features should be adopted at the township level to improve the overall energy efficiency of the towns. Fujisawa SST, Saigon Sports City, and Amsterdam were cited as valuable case studies.
- **Building Level**
There needs to be greater work done on the building level, where integrated building management systems can play a great part. There are savings to be made through an integrated management system. Ocean Financial Centre was referred to as a success story; being the first office building in Singapore to have achieved Green Mark Platinum.

C. Future Trends

- **Subterranean Space**
There are limits with technology and cost in building upwards, and efforts have already been initiated in Singapore to look to subterranean space and its uses. The Jurong Rock Caverns were used as an example of subterranean liquid storage.



- **Aqua Resilient Space**
New trend of creating spaces in the water is gaining traction and its use for floating cities, nearshore data centre and vertical fish farms are examples.
- **Co-sharing of flexible space**
Integrated and shared usage of flexible spaces is also gaining traction.



*From left:
A/P Yu Shi Ming (Head, NUS
Department of Real Estate);
Mr. Tan Swee Yiow (CEO & ED,
Keppel REIT Management Ltd;
President, Singapore Green
Building Council); A/P Sing
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