

Sustainable Construction: Green, Safe and Innovative

Mr. CHAN Ka Kui, SBS, JP
Chairman, Construction Industry Council



Hong Kong Construction Industry

The actual construction expenditure in 2018 was about

HK\$250 billion

which contributed to around
of the Hong Kong GDP.

5%

The construction industry employed about

350,000 persons, which was accounted for

about **9%** of the Hong Kong working population.



Quality Assurance

Sustainable

Commitment

Implementation

Innovative

Professional

Efficient

Cheaper



Experience

Responsible

Caring

Technology

Faster

Safety

Communication

**3D
INDUSTRY...**

DANGEROUS



DIRTY

DULL





INDUSTRY TRANSFORMATION

```
<
PUBLIC FUNCTION [TVARIABLE($NAME, $VAR):
PUBLIC FUNCTION GETHTML($TEMPLATE):
}

CLASS TEMPLATE IMPLEMENTS ITEMPLATE
<
PRIVATE $VARS = ARRAY():

PUBLIC FUNCTION SETVARIABLE($NAME, $VAR)
<
  $THIS->VARS[$NAME] = $VAR;
}

PUBLIC FUNCTION GETHTML($TEMPLATE)
<
  FOREACH($THIS->VARS AS $NAME => $VAR
```



Modules Production @ Factory



Bathroom



MEP System

Dr. John Keung shared a lecture entitled "Changing the Way We Build" organized by the Centre for Liveable Cities on 28 July 2017

- 01** Moving very hot, dusty, messy, unfavorable on-site process to an offsite sheltered factory
- 02** Changing the construction industry into a manufacturing industry
- 03** Build as much as possible in a factory
- 04** Do as little as possible on site
- 05** Intent to achieve a quantum leap in productivity
- 06** DfMA covers the entire chain



www.youtube.com/watch?v=gymE065XbNo



Disciplined Services Quarters for the Fire Services Department

Pak Shing Kok,
Tseung Kwan O



The University of Hong Kong

Student Residence

Wong Chuk Hang



InnoCell Science Park



HONG KONG
HOUSING SOCIETY
香港房屋協會

Housing for the Elderly Jat Min Chuen, Shatin



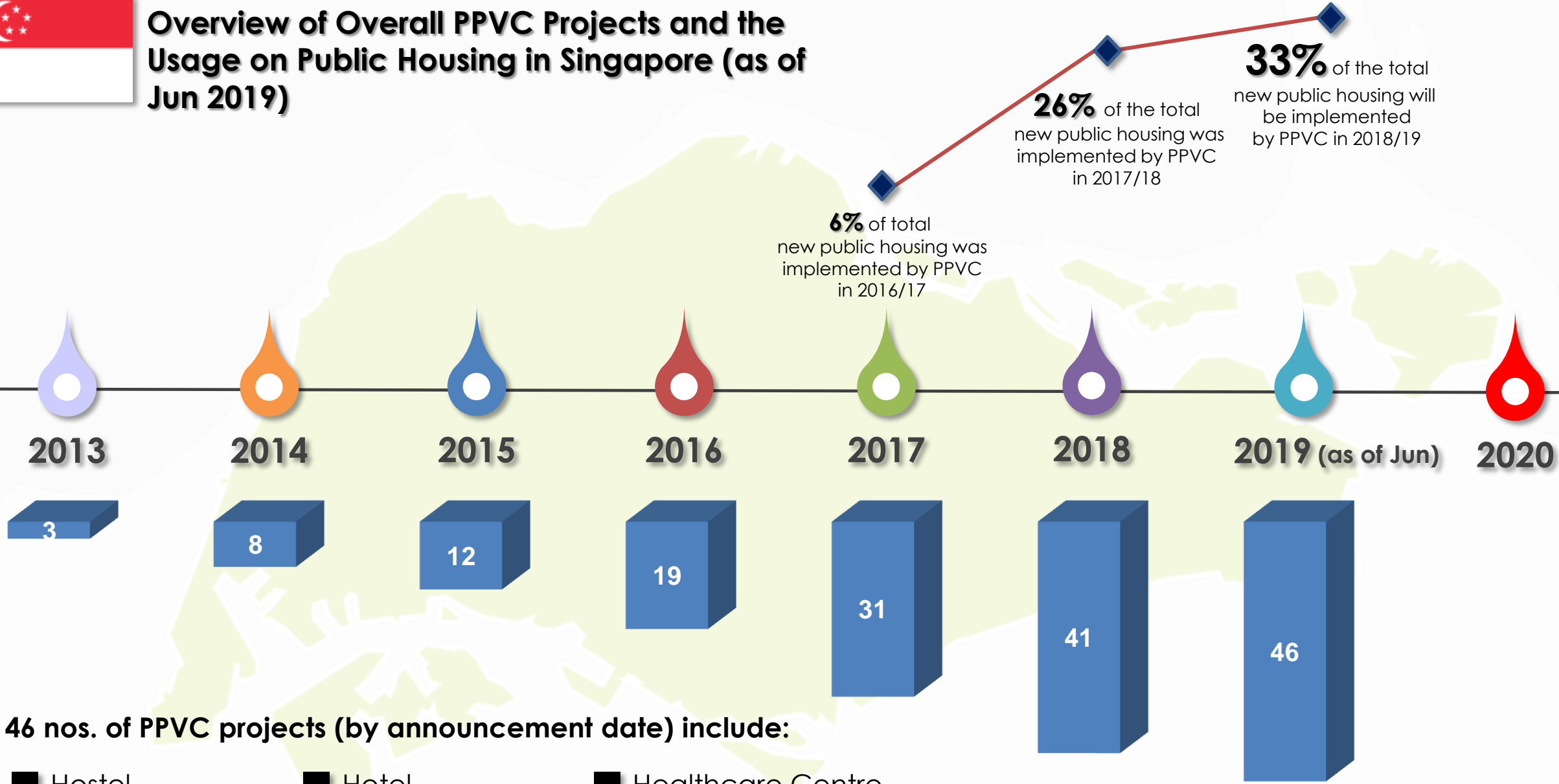
Social Housing Project Kwai Chung



Social Housing Project Sham Shui Po



Overview of Overall PPVC Projects and the Usage on Public Housing in Singapore (as of Jun 2019)



46 nos. of PPVC projects (by announcement date) include:

- Hostel
- Hotel
- Healthcare Centre
- Gov't Building
- Public Housing
- Private Housing

Sources: Annual Report 2017/18
Housing & Development Board

組建城 ◆ 「組裝合成」建築法展現中心

MIC DISPLAY CENTRE

展覽區

EXHIBITION AREA

旅舍

HOSTEL

酒店

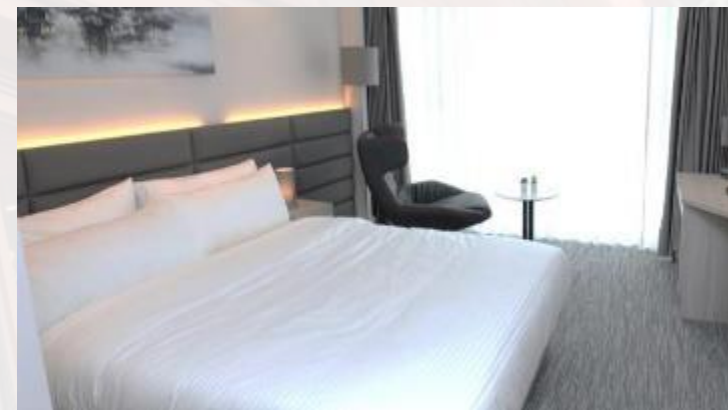
HOTEL

長者之家

ELDERLY HOME

一房 / 三房住宅單位

1-BEDROOM / 3-BEDROOM RESIDENTIAL FLAT



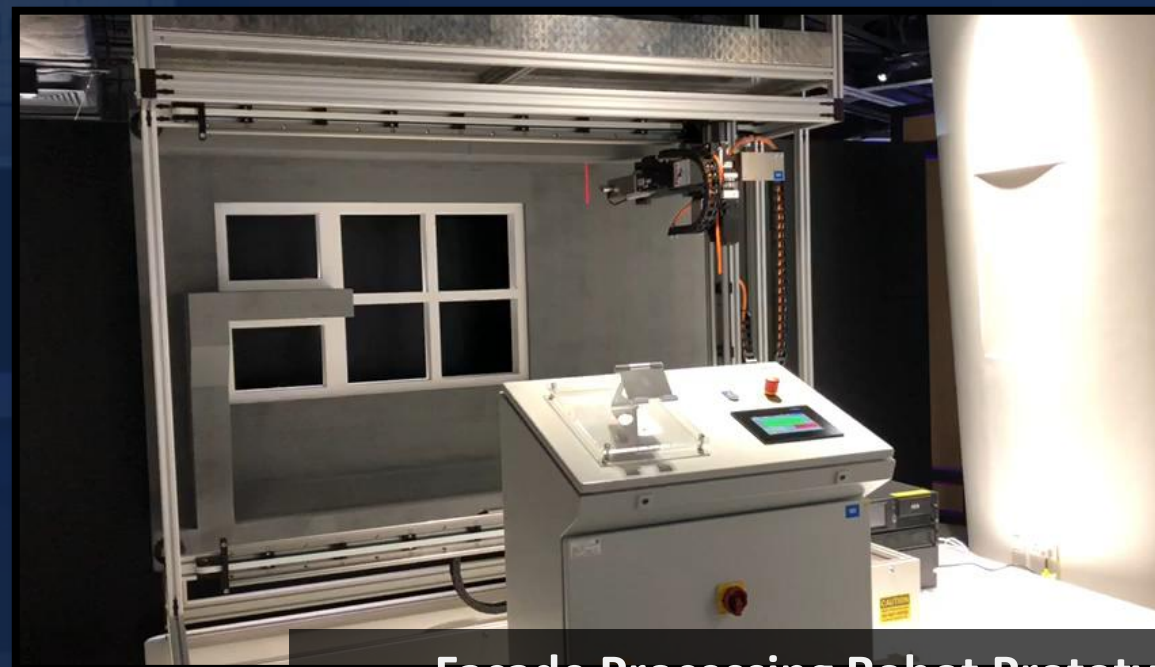
Construction Innovation and Technology Application Centre 建造業創新及科技應用中心



- Industrialisation
工業化
- Informatisation
信息化
- Intelligentisation
智能化
- Integration
一體化
- Infinity
無限化



IoT Safety Helmet



Facade Processing Robot Prototype

主辦單位
Organisers



發展局
Development Bureau



CONSTRUCTION
INDUSTRY COUNCIL
建造業議會

2019 建造創新博覽會 CONSTRUCTION INNOVATION EXPO

2019.12.17-20

香港會議展覽中心
Hong Kong Convention
and Exhibition Centre

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装配式建築

Offsite Construction



建造機器化

Robotics & Automation



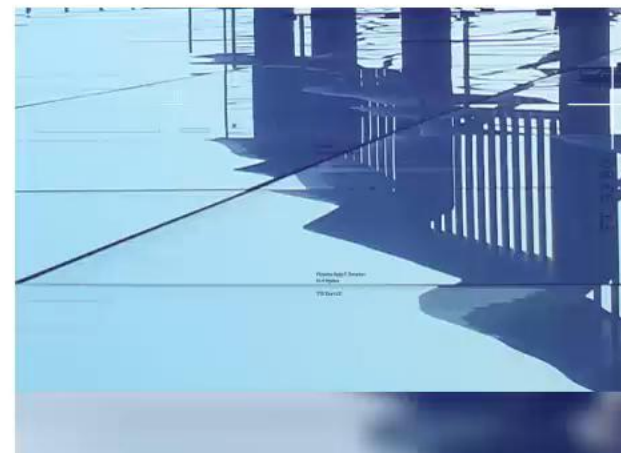
建造數碼化

Digital Solutions



先進技術及材料

Advanced Technologies & Materials



2019 建造創新博覽會
CONSTRUCTION INNOVATION EXPO

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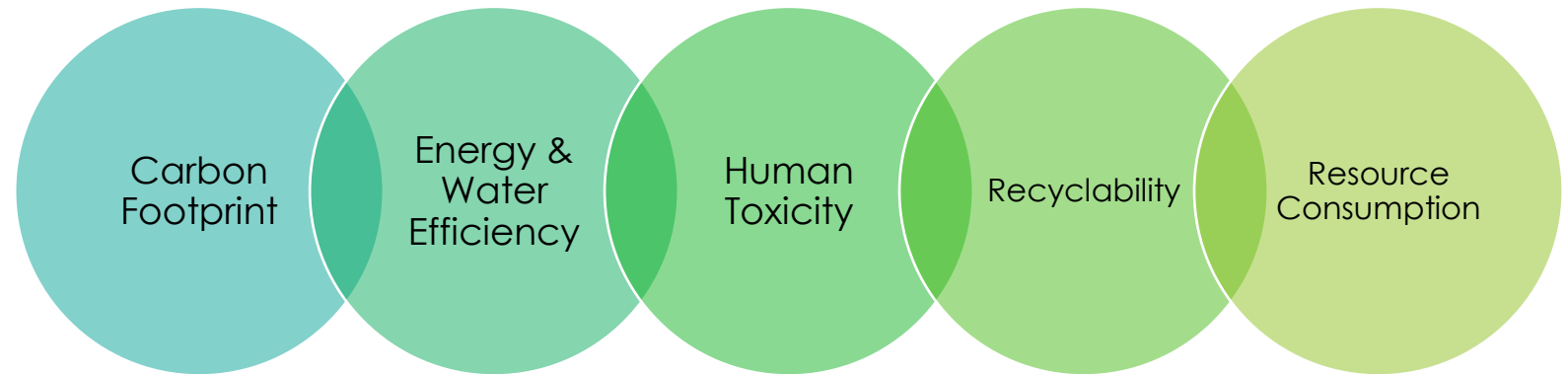


CIC Green Product Certification



CIC GREEN
PRODUCT CERTIFICATION

A leading building and construction materials certification scheme and it considers various aspects:





CIC Carbon Assessment Tool
建造業議會碳評估工具

Scope



Function



Carbon Measurement
for Material and Site
Impact



Facilitate Low-
carbon Design



Performance
Benchmarking



Interactive Tool

Over 100 pilot projects from
public and private sectors

**THANK
YOU**

