



## Creative Transformation



*By Dr. Raymond Yau,  
General Manager, Technical Services and Sustainable Development  
Swire Properties Limited*



Organisers:



International Co-owners:



Sustainable Buildings and Climate Initiative  
Promoting Policies and Practices for Sustainability



# Our Company



Citygate



Pacific Place



Taikoo Place  
Cityplaza

## Hong Kong

Established in 1972

Year 2016

Investment Properties: 26.5 Million sq. ft.

[Office, Retail and Hotel]

Revenue: 16,792 Million HK\$

Underlying Profit: 7,112 Million HK\$

## United States



Brickell City Centre in Miami, US



Daci Temple Project,  
Chengdu

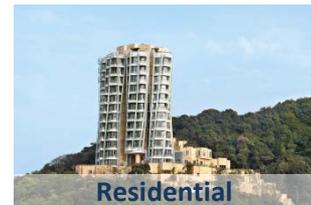
## Mainland China



Hotel



Restaurant



Residential



Services Apartment



Taikoo Li Sanlitun,  
Beijing



INDIGO, Beijing



TaiKoo Hui, Guangzhou



HKRI Taikoo Hui,  
Shanghai

2017



Taikoo Shing  
(residential)

EAST  
(hotel)

Taikoo Place  
(commercial)

TP Apartment  
(Serviced apartment)

Cityplaza  
(retail)



In 1989, Sir Adrian Swire (former chairman of John Swire & Sons) stated...

*“As a Group we should always seek to be ahead of legislation rather than reacting to it: that even if the environmentally “clean” way of doing something is more expensive and therefore on the face of it uneconomic, we should always, regardless of mandatory legislation, have a close look at the overall feasibility of adopting such a practice, both from the point of view of general public good and enlightened self-interest.”*



1907

Dockyard



1922

Staff Quarters



1954

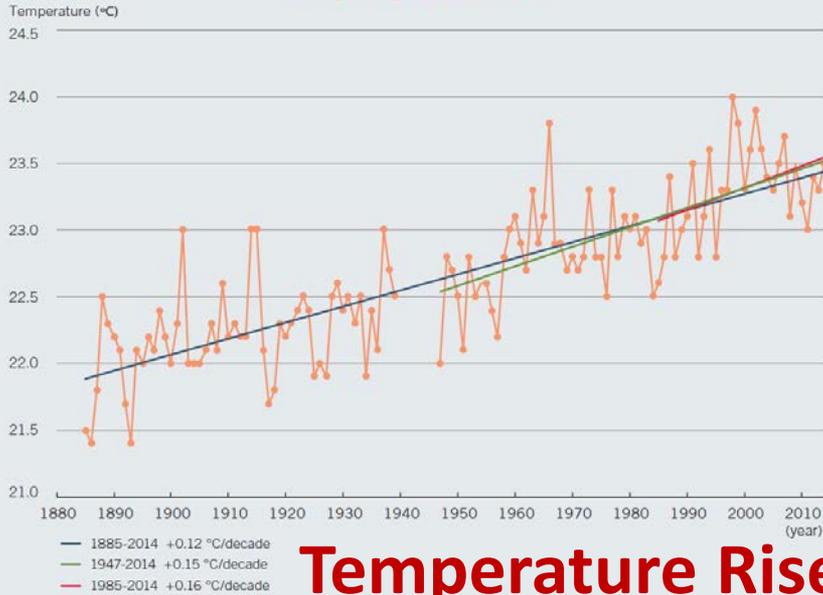
Swimming Pool



1965

Primary School

## TEMPERATURE RISE Hong Kong will be hotter



# Temperature Rise

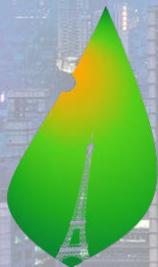
## Urbanization



Mitigation  
Adaptation  
Resilience



# Sea Level Rise



PARIS2015  
UN CLIMATE CHANGE CONFERENCE  
COP21·CMP11

- Paris Agreement: 195 governments committed to prevent climate change by limiting global warming to well below 2 degrees C
- Signaled an acceleration in the transition to a low carbon economy

**To future prove our growth as a developer, how should we respond to this global transformation?**



# Setting a Science Based Target for Swire Properties

“Science-based targets are in line with the level of decarbonisation required to keep a global temperature increase below 2°C compared to pre-industrial temperatures.”

Carbon Intensity  
(Tonnes CO<sub>2e</sub> / m<sup>2</sup>)

0.1600  
0.1400  
0.1200  
0.1000  
0.0800  
0.0600  
0.0400  
0.0200  
0.0000

2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050

2017

2020

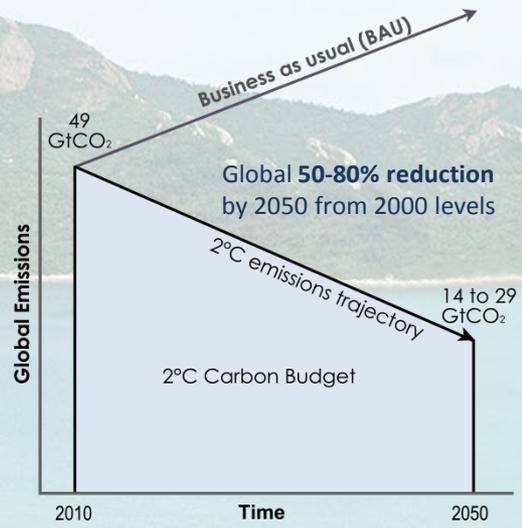
2030

BAU pathway

BAU pathway

<2°C pathway

<2°C pathway



Source: SBTi



INNOVATION



RISK  
MITIGATION



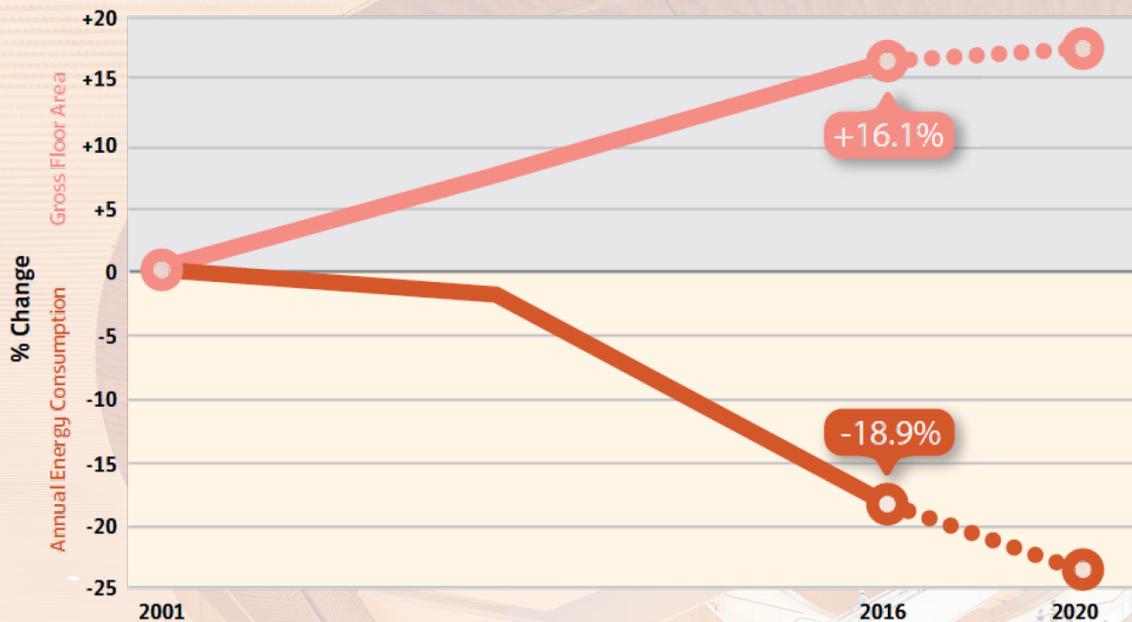
EFFICIENCY



SD VISION

# Energy Saving Strategy and Achievement

Energy Consumption and Gross Floor Area Trend in Hong Kong Portfolio\*



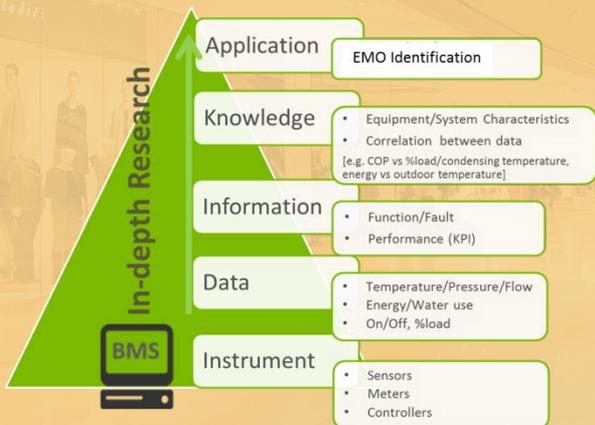
\*Hong Kong Portfolio refers to office and retail portfolio and hotels in Hong Kong.



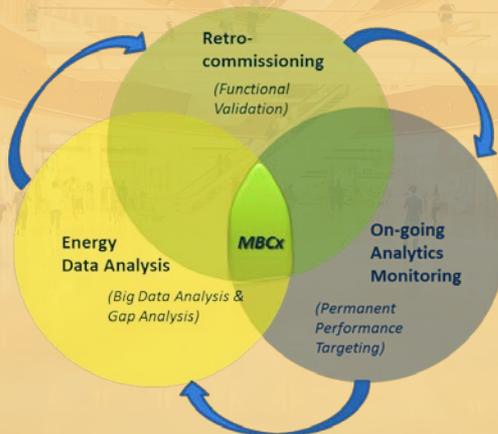
Published in 2015



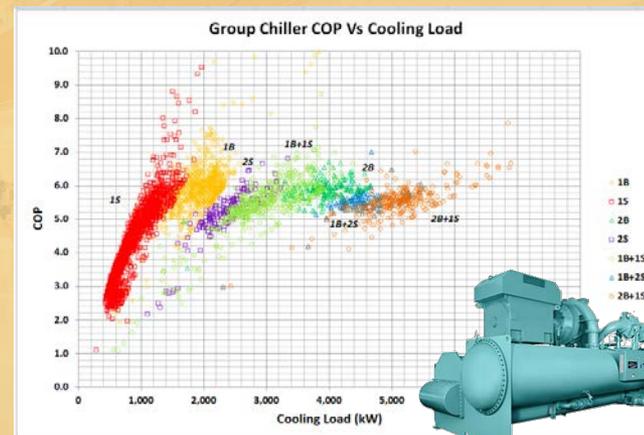
2014 Annual Report on China Building Energy Efficiency



Knowledge Based Management



Retro-Commissioning



Chiller Group COP Coefficient of Performance 7

# SERVING OUR COMMUNITY





# SD 2030 Strategy

## Taikoo Place Redevelopment

### PLACES



- Connecting Places
- Liveability
- Natural Ventilation

### PEOPLE



- Employee Contributions

### PARTNERS



- Integrated Design Approach
- Partnering on Innovation

### PERFORMANCE (ENVIRONMENT)

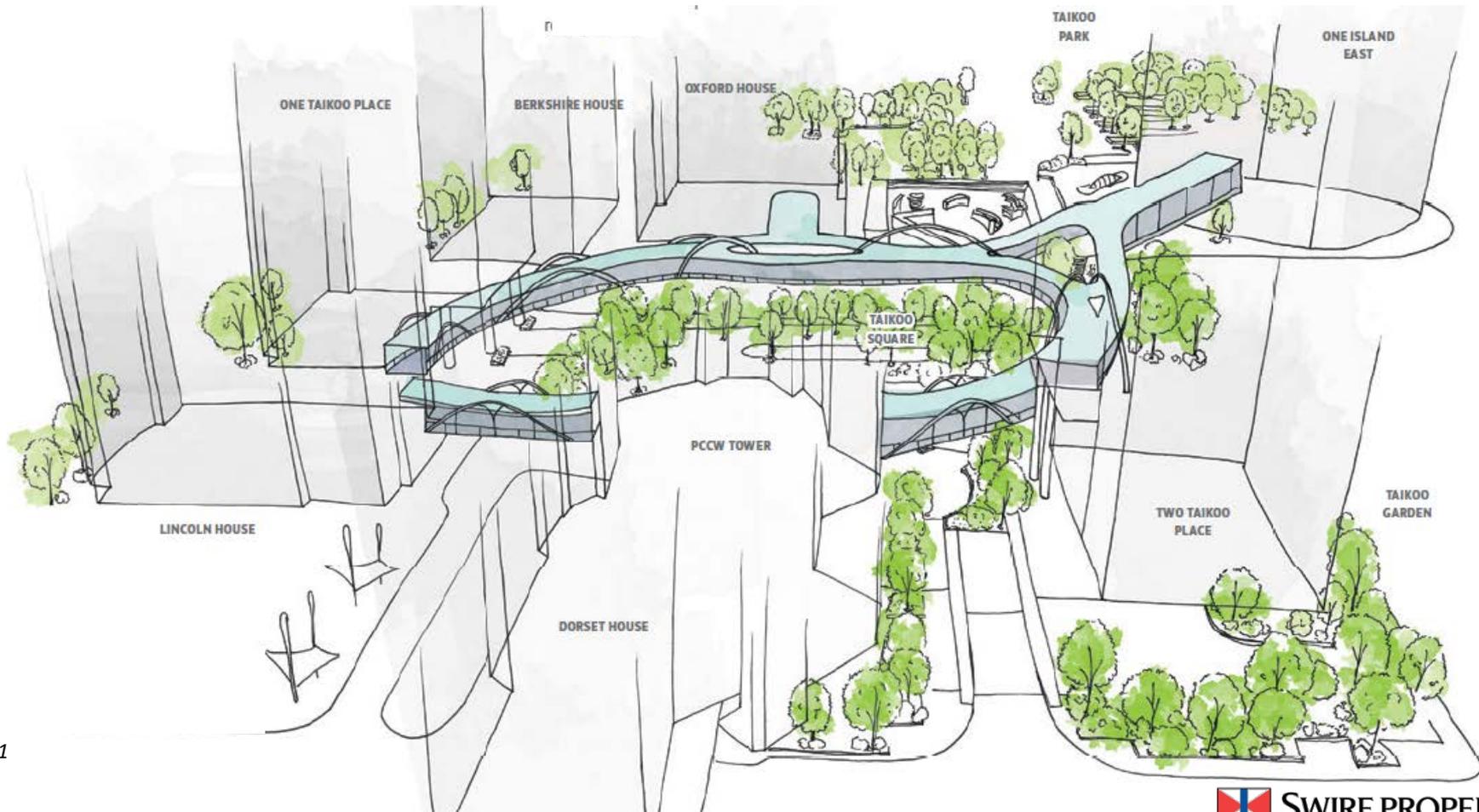


- Capitalising on Data Analytics
- Waste to Energy
- Green Technology
- Optimising Resource Efficiency

### PERFORMANCE (ECONOMIC)



- Long-term Investment



# Come and Find Out SPL's Experience on Sustainable Development

**Day 1 • 5 June 2017** (Mon) • Parallel Session 2 • 16:30 - 18:00

## Session 2.7 - Session Organiser:

**Swire Properties Ltd.**

### Deep Energy Saving and Other Innovative Green Measures for Commercial Buildings in Hong Kong, Mainland China and Overseas

**Level 2 - S224 & 225**

#### Session Chair: **Benny AU**

Sustainable Development Manager, Swire Properties Ltd., Hong Kong SAR

#### Sustainability Strategies on Deep Energy Saving and Energy Management of Property Developer

**Raymond YAU**, General Manager, Technical Services & Sustainable Development, Swire Properties Ltd.

#### Overview of Building Energy Efficiency In China and the Upcoming Trend

**WEI Qingpeng**, Building Energy Research Center, Tsinghua University, Beijing

#### Cost & Value: Multiple Benefits of Green Commercial Buildings In Western Countries

**Phil JONES**, Chair Architectural Science, Welsh School of Architecture, Cardiff University, United Kingdom; Visiting Research Professor, Faculty of Architecture, University of Hong Kong, Hong Kong SAR

#### YKK80 High Efficiency Building - Radiant Control Both Outside and Inside

**Kitaro MIZUIDE**, General Manager, M&E Design Department of NIKKEN SEKKEI, Japan

#### Performance Synergy from Integrated Design, Construction and Operation. Case Study on a High Performance Grade A Office - Swire One Talkoo Place

**Vincent CHENG**, Director of Building Sustainability, Arup, Hong Kong SAR

## Exhibition Booth no.12-13 – 5 to 7 June



**Day 2 • 6 June 2017** (Tue) • Parallel Session 4 • 16:30 - 18:00

## Session 4.7 - Session Organiser:

**Swire Properties Ltd.**

### The Secret Ingredients of Sustainable Real Estate Development

**Level 2 - S224 & 225**

#### Session Chair: **Ashley HEGLAND**

Consultant, Swire Properties Ltd.

#### Themes/Trends of Sustainable Urban Planning and Sustainable Built Environment

**Christopher LAW**, Founding Director, Oval Partnership, Hong Kong SAR

#### Ingredients of Sustainable Real Estate: Criteria, Transparency, Engagement

**Ruben LANBROEK**, Head of Asia Pacific, GRESB, Singapore

#### Climate Change and Sustainable Real Estate: The Environmental, Social, and Economic Implications

**Liam SALTER**, CEO, RESET Carbon

#### Swire Properties' Approach to Sustainable Real Estate

**Raymond YAU**, General Manager, Technical Services & Sustainable Development, Swire Properties Ltd.

## Other Four Technical Papers

- Retro-commissioning Practice and In-depth Analysis Leading to Efficiency Optimization on HVAC Systems: Case Study on A Retail Mall in China. **Jean Qin**, Building Services Manager
- Remarkable Energy Retrofit for Existing Buildings by Advanced Fan Technology: Electronically Commutated Motor Plug Fan. **Isaac Tsang**, Assistant Building Services Manager
- Bringing Sustainable Neighbourhood Design into Reality - Case Sharing by Brickell City Centre, Miami. **Benny Au**, Sustainable Development Manager
- Telecommunications Infrastructure for High Performance Buildings. **Philip Tai**, Telecommunications Manager

THANK  
you!



**Climate Ribbon™ at Brickell  
City Centre, Miami, US**