Creative Transformation

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

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$

Citygate
Pacific Place
Taikoo Place
Cityplaza

Hong Kong

United States

Brickell City Centre in Miami, US
Daci Temple Project, Chengdu

Mainland China

Taikoo Li Sanlitun, Beijing
INDIGO, Beijing
TaiKoo Hui, Guangzhou
HKRI Taikoo Hui, Shanghai

Leaderhip Category

- Brickell City Centre in Miami, US
- Daci Temple Project, Chengdu
- Taikoo Li Sanlitun, Beijing
- INDIGO, Beijing
- TaiKoo Hui, Guangzhou
- HKRI Taikoo Hui, Shanghai
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.”
Mitigation
Adaptation
Resilience

Temperature Rise

Urbanization

Sea Level Rise
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?
“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.”
Energy Saving Strategy and Achievement

Energy Consumption and Gross Floor Area Trend in Hong Kong Portfolio

-20 % Change
-15
-10
-5
0
5
10
15
20
+16.1%
-18.9%

2001 2016 2020

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

Knowledge Based Management

Application
- EMO Identification

Equipment/System Characteristics
- Correlation between data (e.g., COP vs. load/condensing temperature, energy vs. outdoor temperature)

Knowledge
- Function/Fault
- Performance (KPI)

Information
- Temperature/Pressure/Flow
- Energy/Water use
- On/Off, %Load

Data
- Sensors
- Meters
- Controllers

Instrument

BMS

In-depth Research

Knowledge Based Management

Retro-Commissioning

Energy Data Analysis
(Big Data Analysis & Gap Analysis)

MBGx

On-going Analytics Monitoring
(Permanent Performance Targeting)

Group Chiller COP vs Cooling Load

Chiller Group COP Coefficient of Performance
SERVING OUR COMMUNITY
"Our vision is to be the leading sustainable development performer in our industry globally by 2030."

Guy Bradley
Chief Executive
SD 2030 Strategy
Taikoo Place Redevelopment

- Connecting Places
- Liveability
- Natural Ventilation

- Employee Contributions

- Integrated Design Approach
- Partnering on Innovation

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

- 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 Inside 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

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

Exhibition Booth no.12-13 – 5 to 7 June
Climate Ribbon™ at Brickell City Centre, Miami, US