# Planning & Development Division SURVEYORS PDD Annual Conference 香港測量師學會 Green Building and Environmental Planning Design

Date: 10th October 2015 (Saturday)

Time: 9:00am to 1:00pm (Registration Time: 8:30am)

Venue: HKIS Surveyors Learning Centre

12/F, Wing On Centre,

111 Connaught Road Central, Sheung Wan, Hong Kong





#### ABOUT THE CONFERENCE

Hong Kong has been facing steady population growth and shortage of land with limited development space in the last few decades and years ahead, it makes our city to become one of the most and high density cities in the world; maintaining air, space and quality of living is a challenging task for the professionals.

Recently, the development of green and environment planning design becomes popular and more innovative around the world. The Buildings Department has first launched the Practice Note for Sustainability Built Environment and Building Design Guidelines in 2011. The invention of BEAM Plus system has also made a new standard of green and sustainable buildings in Hong Kong.

The conference is to review the past efforts, project sharing and future development for the green building and environment planning design in Hong Kong. How can we develop a more sustainable and healthier city in the future?

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The Hon K S Wong, JP, Secretary for Environment	
Key Note Speaker	
Ir Conrad Wong, BBS, JP, Chairman, HKGBC	
Ir Victor Cheung, BBS, Immediate Past President of HKIE	
Sr Kenneth Chan, Past President of HKIS	
Mr Larry Poon Chi Fai, Wong Tung and Partners	
Ir Cary Chan, Swire Properties	
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#### MESSAGE FROM PDD CHAIRMAN

On behalf of the Organizing Committee, I wish to extend my warm welcome to all our distinguished speakers, guests, all members and participants of the HKIS Planning & Development Division Annual Conference 2015: "Green Building and Environmental Planning Design".



As you all are aware, the HKSAR has been facing with a serious problem of shortage of land and high density of living environment. The problem is mainly due to the steady population growth with housing shortage with limited development space in the last few decades and years ahead. The main theme of this Conference is to review the past efforts, project sharing and future development for the green building and environment planning design in Hong Kong. I believe all participants will be able to learn a lot from the insight of our distinguished speakers today.

I would also like to express my sincere thanks to all members of the Organizing Committee and HKIS Secretariat colleagues for their assistance and unfailing support to this Conference.

Please join me in wishing the HKIS and all its members every success in the years to come.

Sr Dr. Tony Leung

Ph.D,MSc(IRE)(Dist.),BSSc(Hons),RPS(GP/PD/PFM),FHKIS,FRICS,FHIREA

Chairman of Organizing Committee for HKIS PDD Annual Conference 2015

Chairman of HKIS Planning & Development Division



#### BRIEF UPDATE OF PLANNING AND DEVELOPMENT DIVISION:

In 2015, PDD has organised many CPD events and site visit successfully. The number of participants and response is encouraging. We will continue to organise more CPD events and site visits in the future. Meanwhile, the member of Planning and Development division has been growing steadily throughout the year, and we receive a very good support from our Division and our Institute.

For our professional, Planning & Development Surveyors provide a comprehensive range of professional services in town planning and property development. We strongly support green building and environmental planning design in the city.



## **CONFERENCE PROGRAMME:**

08:30 – 09:00	Registration		
09:00 - 09:10	Welcome	Sr Dr Leung Ka Tung, Tony	
	Speech	Chairman, Planning and Development Division	
09:10 - 09:15		Souvenir presentation to speakers and group photos	
09:15 – 09:45 Speaker 1	The Hon K S Wong, JP		
	Secretary for Environment		
	Keynote speech		
	Q&A		
09:45 - 10:15 Speaker 2	Speaker 2	Ir Conrad Wong, BBS, JP	
		Chairman, HKGBC	
	Topic: What is the true cost / value of green building?		
	Q&A		
10:15 – 10:45 Speaker 3	Ir Victor Cheung, BBS		
	Immediate Past President of HKIE		
	Topic: An Integrated Approach to Green Building Design		
		Q&A	
10:45 - 11:00	Tea Break		
11:00 - 11:30 Speaker 4	Speaker 4	Sr Kenneth Chan	
		Past President, HKIS	
		Topic: Top Performers in BEAM Plus Assessment	
	Q&A		
11:30 – 12:00 Speaker 5	Speaker 5	Mr Larry Poon Chi Fai	
		Wong Tung and Partners	
	Topic: Beam Plus: Why bother exploring the neighbourhood?		
	Q&A		
12:00 – 12:30 Speaker 6	Speaker 6	Ir Cary Chan	
		Swire Properties	
		Topic: The Challenge of Greening Our Existing Buildings	
		Q&A	
	Vote of Thanks	Sr Professor James Pong	
		Vice President, Planning and Development Division	
	End of Conference	End of Conference	



#### SPEAKERS AND ABSTRACTS

The Hon K S Wong, JP
Secretary for Environment
Hong Kong Special Administrative Region Government

# 米性野

#### Keynote speech

# Biography:

Mr KS Wong was born in 1963 and is an architect by profession. He has been promoting green building and building energy efficiency over the past years. He had served as the Vice Chairman of the Hong Kong Green Building Council and the Chairman of the Professional Green Building Council. He has contributed to the development of local green building standards and taken part in a number of green building projects.

Before joining the Government, he has contributed to the work of a number of Government advisory bodies. In particular, he had active involvement in the public engagement processes of the Council for Sustainable Development. He was the convener of the Support Group on Combating Climate Change: Energy Saving and Carbon Emission Reduction in Buildings. He was also a member of the Support Group on Building Design to Foster a Quality and Sustainable Built Environment.

Mr Wong graduated from the Department of Architecture of the University of Hong Kong. He received further education on green building from the University of British Columbia in Canada. He has been appointed as the Secretary for the Environment of the HKSAR Government and assumed the post on 1 July 2012.

# Ir Conrad Wong, BBS, JP

Chairman, HKGBC

Topic: What is the true cost / value of green building?



# Biography:

Ir Conrad Wong has over 25 years of construction project management experience. He is Vice Chairman of Yau Lee Holdings Limited. His areas of expertise include strategies planning, building construction, precast construction technologies, safety and quality management and green building technologies.

Ir Wong is active in public and community services, he has been appointed as the Chairman of the Hong Kong Green Building Council, the Chairman of the Occupational Safety and Health Council, the Deputy Chairman of Vocational Training Council, Member of the Antiquities Advisory Board, Member of the Advisory Council on the Environment, and Member of the Panel on Promoting Testing and Certification Services in Construction Materials Trade as well as the Director of the World Green Building Council. In the past, Ir Wong served as the President of the Hong Kong Construction Association, the President of the International Federation of Asia and West Pacific Contractors' Associations, the Chairman of Pneumoconiosis Compensation Fund Board and the Member of Construction Industry Council.

# Synopsis:

Green building is not simply putting the two "nouns" together in one sentence. It involves the deepest meaning in recent years. Saving the planet is the obvious outcome. Not only is there the dream of saving the planet, green building also improves the wellbeing of the people by transforming the city into a greener built environment.

In Hong Kong, about 90% of the electricity goes to power building which represents about more than 60% of our total carbon emission. According to the trend, by 2030 it will take 3 Earths' resources to sustain our lifestyle! We cannot tackle carbon emission problem without addressing energy consumption for building.

With greater health and productivity it has attracted many worldwide companies to go green in their construction. More and more new construction technologies are being developed to facilitate with this escalating shift to sustainability. At the same time, the most frequent question being asked by people: "What is the extra cost for Green Building? Is it worth to spend money for developing the green building? If there is no additional incentive for the developer to go GREEN, why should we do so?"

In this conference, Ir Wong would like to take this opportunity to share with the audience that we should start thinking about life cycle carbon cost and brings the cost or value analysis into a GREEN prospective. It is the true cost or value of Green Building.

#### Ir Victor Cheung, BBS

Immediate Past President of HKIE

Topic: An Integrated Approach to Green Building Design



#### Biography:

Ir Victor Cheung is a Registered Professional Engineer in Building Services and Fire Disciplines. After graduation with a BSc (Hons) Degree with first class honours in Environmental Engineering at the London South Bank Polytechnic, Ir Cheung pursued further studies and obtained a Master Degree in Energy Engineering from the University of Surrey in UK.

Ir Cheung has over 39 years of experience in building services engineering working on a wide spectrum of building and infrastructure projects. He is a Director of J. Roger Preston Ltd, a leading building services engineering consultancy in the South East Asia region established in 1962.

Ir Cheung is particularly interested in promoting energy efficiency and environmental sustainability and has been heavily involved in the development of the Building Energy Code for the HKSAR Government. He was a founding member of the Professional Green Building Council and a Director since 2009. He is currently a member of the Energy Advisory Committee of the Environment Bureau of the HKSAR Government.

# Synopsis:

Nowadays people around the globe are becoming increasingly aware of the adverse impact to the environment caused by climate change. In the past two last decades, engineers and architects in Hong Kong have been working diligently to incorporate energy efficient and green features into the building design while the government is setting policies on promoting green buildings.

Buildings in Hong Kong consume about 90% of the electricity produced. By improving the building energy efficiency, not only can greenhouse gas emissions be reduced but the urban heat island effect can also be greatly alleviated. Besides energy efficiency, green buildings also improve the indoor environmental quality and reduce the usage of water and material resources, thus reducing the environmental impacts of buildings. Successful green buildings require an integrated approach involving close collaboration among the architect, the building services engineer and the owner to achieve an optimal design with the least overall project life cycle cost.

# Sr Kenneth Chan Past President, HKIS

Topic: Top Performers in BEAM Plus Assessment



# Biography:

Kenneth received his Bachelor of Science in Building Surveying from Leicester Polytechnic, United Kingdom in 1977. He has worked in the construction industry mainly in Hong Kong with assignments in Singapore, Bangladesh, Tokyo and many cities in the Mainland. He specialises in Design of New Buildings, Project Management, Building Surveys, Renovation and Repairs and Maintenance of all kinds of buildings. He has project managed two Green Building Award winning developments: One Peking (2006) and Dormitory and Facility Extension Block of United Christian College (Kowloon East) (2010). He is a Past President of the Hong Kong Institute of Surveyors and Hong Kong Institute of Facility Management. He chaired the Professional Green Building Council of Hong Kong in 2005 and 2006. He was a Director of the Hong Kong Building Council Limited in 2010 and 2011. He was a Site Aspects Panel Chair of the Technical Review Committee of BEAM Society Limited in 2012 and 2013. He is currently a Director of BEAM Society Limited and Deputy Chairperson of the Technical Review Committee.

#### Mr Larry Poon Chi Fai Wong Tung and Partners

Topic: Beam Plus: Why bother exploring the neighbourhood?



# Biography:

Larry is an architect planner in private practice with the Hong Kong-based consulting firm, Wong Tung and Partners Ltd. Over the years, he has served both the HKIA and HKIP in different capacities and has been a standing committee member at HKGBC since 2011. Currently at HKGBC, he is with the Green Labelling Committee and WSBE17 Scientific Committee, as well as the Convenor of the Steering Committee for BEAM Plus Neighbourhood Study which commenced in late 2012.

# Synopsis:

Sustainability principles and practice are increasingly regarded as fundamental, or even inevitable, generators in the planning and design of our built environment. The use of rating tools has emerged in recent decades as a popular means to assess the performance of development proposals in order to meet desired sustainability objectives. Around the globe, there are currently hundreds of rating tools available at building level to help stakeholders of the development industry reduce undesirable impacts during the implementation of a building project. There is, however, relatively less systemic effort in incorporating similar principles in the process of conceiving our urban form. In Hong Kong, a methodology has yet to be introduced to evaluate the performance of our public realm when buildings are developed as a cluster (or "neighbourhood") at local area scale. The first part of this presentation attempts to explore the nexus between sustainability and the unique context of our city in terms of urban morphology and typology. We then provide an overview of BEAM Plus Neighbourhood - the new rating tool for urban sustainability being developed by the Hong Kong Green Building Council (HKGBC), with the aim to fill the gap in the market by providing a framework for considering the issues and opportunities that may affect the masterplanning of a development. A brief history and genealogy of similar rating tools will also be presented.

#### Ir Cary Chan

General Manager, Technical Services and Sustainability, Swire Properties Limited

Topic: The Challenge of Greening Our Existing Buildings



# Biography:

Ir W H Chan is a professional engineer and is currently responsible for overseeing the sustainability policies and strategies for Swire Properties. Over the years, he has carried out a lot of researches and energy saving initiatives with substantial improvements in energy performance of buildings. He is currently a Director of HK Green Building Council, Business Environment Council and the BEAM Society Ltd. Cary also chairs the Policy and Research Committee which is to drive for the enhancement in the sustainable development performance of the industry.

Cary is the Chairman of Environmental Education & Community Action Projects, a member of Environmental Campaign Committee, Energy Advisory Committee, Environment & Conservation Fund Committee and Advisory Council on the Environment.

#### Synopsis:

Comparing to developing new green buildings, there are multifaceted barriers in driving the owners or occupants to green their existing buildings. Existing building may be multi-owned by different parties with discrepant expectation which make financing green projects difficult. To make it even worse, the multi-owners may not necessarily benefit directly and leads to hesitation in funding retrofit projects. Besides energy saving retrofits, other greening projects are not driven by payback mechanism, but only recognized by social value.

A basket of strategies is necessarily tailored to each barriers faced by owners of existing building. In this presentation, I will try to explore all challenges and possible ways forward. Carrots and sticks from government are critical in motivating the industry to act. Strategies ranging from mandatory requirements to cash incentives / loans, emission trading system and effective building assessment tools will be discussed.



#### PLANNING AND DEVELOPMENT DIVISION:

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#### **ORGANISING COMMITTEE:**

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