

Future Cities

Towards Sustainable Vertical Urbanism

未来城市

迈向可持续的垂直城市主义

Post-Conference Report Shanghai, China

会后报告 中国上海



CTBUH 2014
International Conference | 国际会议

16-19 September | 9月16日至19日
Grand Hyatt Jin Mao | 金茂君悦酒店
Shanghai | 上海



Council on Tall Buildings and Urban Habitat
世界高层建筑与都市人居学会
S.R. Crown Hall
Illinois Institute of Technology
3360 South State Street
Chicago, IL 60616

Phone (电话): +1 (312) 567-3487
Fax (传真): +1 (312) 567-3820
Email (电子邮箱): info@ctbuh.org

CTBUH Asia Headquarters Office
CTBUH亚洲总部办公室
Room 103 Wenyuan Building, College of Architecture and
Urban Planning, Tongji University
1239 Si Ping Rd, Yangpu District, Shanghai, China 200092
同济大学建筑与城市规划学院, 文远楼103室
中国上海市杨浦区四平路1239号 200092

<http://www.ctbuh.org>

Editors (编辑): Daniel Safarik and Antony Wood

Translators (翻译): Shengliang Rong, Rui Chen, Liwen Kang
& Qiao Xu

Translation Peer Review (翻译同行审查): Peng Du

Design and Layout by (设计排版): Kristen Dobbins

Contributors (编著者): Terri Meyer Boake, University of
Waterloo; Don Davies, Magnusson Klemencic Associates;
Michael Dawson, LYT Architecture; Mark Garland, LCL
Builds; Marshall Gerometta, CTBUH; Mikela Marques, LYT
Architecture; Philip Oldfield, University of Nottingham; James
Parakh, City of Toronto; Daniel Safarik, CTBUH; Paul Scott,
Make Architects; Dario Trabucco, CTBUH / Iuav University of
Venice; Sergio Valentini, JAHN

Published by (出版): Council on Tall Buildings and Urban
Habitat (世界高层建筑与都市人居学会)

Printer (印刷): The Mail House, Chicago (The Mail House,
芝加哥)

Copyright (版权): Council on Tall Buildings and Urban
Habitat 2014 (世界高层建筑与都市人居学会 2014)

All rights reserved. No part of this publication may be
reproduced or transmitted in any form or by any means,
electronic or mechanical, without permission in writing
from the publisher.

保留所有权利。未经出版商书面许可, 不得对本出版物
的任何部分以任何的形式或者通过电子、机械或其他途
径进行重印或传播。

Trademark notice: Product or corporate names may be
trademarks or registered trademarks, and are used only for
identification and explanation without intent to infringe.
版权申明: 产品或公司名称可能是商标或注册商标, 仅
用于鉴别与说明而非有意侵犯。

Unless otherwise credited, all photography is
copyright CTBUH
除非另作说明, 所有图片版权归CTBUH所有。

ISBN: 978-0-939493-43-2

Cover Images | 封面图片

For more information on the "Innovative 50 Icons"
found on the cover of this report, please see pages 8-9.
The background cities in the graphics include all urban
agglomerations projected to reach populations of over 4
million by 2025.

了解更多关于本书封面"50座创新性高层建筑"的信息,
请查看第8-9页。图像背景中的文字包含了预期在2025
年拥有400万人口的城市。

With Sincere Thanks to all the Conference Sponsors: 衷心地感谢所有会议赞助商:

Diamond | 钻石级



上海 | 中 | 心
Shanghai Tower



Platinum | 铂金级



BFC THE BUND
FINANCE CENTER
外滩金融中心



CITIC PACIFIC



Schindler

Gold+ | 顶级黄金级



الغدير للإنشاءات
Al Ghurair Construction



华东建筑设计研究院



ISA ARCHITECTURE
ISAPLANNING 上海佳华设计研究院有限公司



同济设计 TJAD



Gold | 黄金级



中国建筑设计研究院
CHINA ARCHITECTURE DESIGN & RESEARCH INSTITUTE



深業 深业置地
SHUM YIP LAND



SINAR MAS
CENTER
金光中心

Silver+ | 顶级白银级



ROLF JENSEN & ASSOCIATES, INC.
GLOBAL FIRE PROTECTION CONSULTANTS



RWDI
CONSULTING ENGINEERS
& ARCHITECTS



Kier



上海建中信息技术有限公司
SHANGHAI JIANZHONG INFORMATION TECHNOLOGY CO., LTD.



TISHMAN SPEYER



Silver | 白银级



BROAD GROUP
远大集团



中建一局集团建设发展有限公司
CHINA CONSTRUCTION FIRST GROUP CONSTRUCTION & DEVELOPMENT CO., LTD.



GOETTSCH
PARTNERS



Hill International



Tongji
University
同济大学



Architectural Society of
Shanghai China
上海市建筑学会



Chinese Society for
Urban Studies
中国城市科学研究会

Supporting Partners | 支持单位

Media Partners | 媒体合作伙伴



What's Inside?

目录

Introduction | 简介



- 4 Conference Overview | 会议概览
- 8 Conference Graphics: 50 Innovative Icons | 会议图表: 50座创新型地标建筑

Plenary Sessions and Conference Themes | 全体大会及会议主题



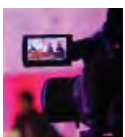
- 10 Opening Plenary: The Future Three Tallest Buildings in China | 开幕全体大会: 三座未来“中国最高建筑”
- 12 Conference Highlight: “In Detail” Book Series Launch | 会议亮点: CTBUH 发行“深入解读”系列出版物
- 14 Conference Focus: Tall Buildings as International Investments | 会议聚焦: 高层建筑作为一项全球性投资
- 16 Plenary Two: Towards “Sustainable Vertical Urbanism” | 全体大会二: 迈向“可持续的垂直城市主义”
- 18 Conference Highlight: International Student Design Competition | 会议亮点: 国际学生设计竞赛
- 20 Conference Focus: The Differences in Developing Tall Buildings in Cities in China | 会议聚焦: 中国城市中高层建筑开发的不同之处
- 22 Multi-Session Theme: Rethinking and Connecting Skyscrapers | 多分会主题报告: 反思和连接摩天大楼
- 24 Conference Highlight: CTBUH Chairman Transitions | 会议亮点: CTBUH主席席位交接
- 26 Multi-Session Theme: Optimizing Tall Building Sustainability | 多分会主题报告: 高层建筑的可持续性优化
- 28 Conference Highlight: Green Walls in High-Rise Buildings Technical Guide Launch | 会议亮点: CTBUH 发行垂直绿化技术指南
- 30 Conference Focus: The Challenges of Constructing and Project Managing Tall Buildings in Asia | 会议聚焦: 亚洲高层建筑施工和项目管理中面临的挑战
- 32 Multi-Session Theme: China Tall: Developing for Profits and the Urban Realm | 多分会主题报告: 中国高层建筑开发与其对城市设计的影响
- 34 Conference Highlight: Research Seed Funding | 会议亮点: 种子研究基金
- 36 Conference Focus: Has CTBUH Got its Height Criteria Correct? | 会议聚焦: CTBUH采用的高度评定标准是否正确?
- 38 Multi-Session Theme: Building Occupiers & Urban Design | 多分会主题报告: 建筑使用者与城市设计
- 40 Conference Highlight: 2014 Tall Buildings Quiz | 会议亮点: 2014高层建筑问答测试
- 42 Technical Workshops | 技术研讨会
- 46 Project Room: Shanghai Tower Room | 项目报告厅: 上海中心大厦报告厅
- 48 Project Room: Ping An Finance Center Room | 项目报告厅: 平安国际金融中心报告厅
- 50 Project Room: Suzhou Zhongnan Center Room | 项目报告厅: 中南中心报告厅
- 52 Closing Plenary: From China to New York... | 闭幕全体大会: 从中国到纽约

Social Events and Tours | 社交与参观活动



- 56 Social Networking Events | 社交活动
- 62 Technical Building Tours | 建筑技术参观
- 66 Regional City Tours | 城市参观

Exhibitors, Press, Statistics and Feedback | 参展商、媒体、参会者统计与反馈



- 68 Exhibitors | 参展商
- 69 Press Coverage | 新闻报道
- 70 Attendance Statistics | 参会者统计
- 72 Delegate Feedback | 代表反馈意见
- 74 List of Speakers & Papers | 演讲者名单 & 论文
- 80 Conference Committees | 会议委员会
- 81 CTBUH Organizational Structure & Members | CTBUH组织结构 & 会员
- 83 DVD: Conference Proceedings & Presentations | DVD: 会议论文集 & 演讲报告

Conference Overview

会议概览

Towards “Sustainable Vertical Urbanism”: An Introduction

The CTBUH 2014 Shanghai Conference, entitled “Future Cities: Towards Sustainable Vertical Urbanism” was convened to drive thinking beyond just buildings, to considering cities as a whole. Held at the Grand Hyatt Jin Mao from 16-19 September, the Conference drew 1,017 delegates from 124 cities in 41 countries around the world to attend three full days of sessions.

The world’s leading owners, developers, contractors, architects, planners, engineers and policy-makers came together in Shanghai, to ask the question: What best practices are some cities in the world already doing, and what else can be done? They came to work together to rethink our cities; to develop them beyond a collection of disparate icons, towards a vision of a connected, maximized, Sustainable Vertical Urbanism.

The Conference was of a scale unprecedented in recent CTBUH history. Three plenaries, three session tracks and a panel discussion track were augmented by eight technical workshops, and three additional tracks devoted to the next three tallest buildings in China – Shanghai Tower, Ping An Finance Center, Shenzhen, and Suzhou Zhongnan Center. This made for an intense flurry of activity.

The Conference was particularly notable for bringing together the developers of these next three tallest buildings in China to deliver the keynote address during the opening plenary. The top senior management of these developers joined an additional dozen VIPs from across China and the world, for a photo shoot in front of the CTBUH Skyline (see image top right).

The true scope of the Conference is perhaps easier to understand via the physical items attendees received onsite. Tote bags were filled to capacity with four large, hardbound publications – the main conference proceedings containing 116 papers keyed to each session, and three “In Detail” books devoted to Shanghai Tower, Ping An Finance Center and Suzhou Zhongnan Center – in addition to electronic copies of each session’s Power Point presentation. It is safe to say no one left Shanghai empty-handed or short on ideas.

This Post-Conference Report features the highlights of the Conference and communicates the quality, as well as the scale, of the dialogue.

迈向“可持续发展的垂直城市主义”: 引言

CTBUH 2014年上海会议以“迈向可持续发展的垂直城市主义”为主题，旨在引导人们从超越建筑单体的城市整体视角出发进行思考。会议于9月16日至19日在上海金茂君悦酒店召开，吸引了来自全球41个国家的124个城市的1017位代表前来参加为期三整天的会议研讨。

世界顶级的业主、开发商、承包商、建筑师、规划师、工程师和决策人在上海齐聚一堂，共同提出这样一个问题：当今世界上的城市已经完成的最佳建筑实践有哪些？我们在此基础上还能如何进行提高？参会者们聚集在此，共同反思我们的城市；即如何使高层建筑不再是一座座毫无关联的标志物，而是向着相互联系的、最大化的、可持续发展的垂直城市主义迈进。

此次会议达到了CTBUH近几年历史上前所未有的规模。除了三次全体大会，三个分会议程和专题对话外，这次会议还包括8个技术研讨会和3个聚焦中国未来三座最高建筑（上海中心大厦、深圳平安金融中心和苏州中南中心）的专题报告。这就带来了一系列紧张和密集的日程。

特别值得一提的是此次会议请到了中国未来三座最高建筑的开发商们，他们在开幕全体大会上为大家发表了主题演讲。会后这些来自中国和世界的开发商的高层主管与其他十几位贵宾一起在CTBUH天际线背景板前一起合影留念（右页上图）。





World's Leading Tall Building Developers Gather at the CTBUH 2014 Shanghai Conference: Front Row (from left to right): Cathy Yang, General Manager, Taipei 101; Shiling Zheng, Tongji University / Academician, China Academy of Sciences; Wai Ming (Thomas) Tsang, CEO, Ping An Finance Center; Jianping Gu, President and Board Director, Shanghai Tower; Dong Shen, Executive General Manager, Suzhou Zhongnan Center; Yang Wu, CEO, The Bund Finance Center; Nengjun Luo, Vice General Manager, CITIC HEYE Investment CO., LTD. / Zhongguo Zun Middle Row (from left to right): James Robinson, Executive Director, Hongkong Land; Antony Wood, Executive Director, CTBUH; Timothy Johnson, CTBUH Chairman / Design Partner, NBBJ; David Malott, CTBUH Chair Elect / Principal, Kohn Pedersen Fox; Mounib Hammoud, CEO, Jeddah Economic Company / Kingdom Tower; Robert Pratt, Managing Director, Tishman Speyer Properties Back Row (from left to right): Zhenyu Li, Dean, Tongji University; Zhaohui Jia, Chief Deputy Architect, Greenland Group; Kazunari Kano, Group Executive Officer, Mori Building China / Shanghai World Financial Center; Wing Ip (David) Ho, Head of Design, New World Development; Yoshinori Kotera, Director, APP China / Sinar Mas Center; Peter Kok, Associate General Manager, Shum Yip Land

全球顶级高层建筑开发商齐聚CTBUH 2014年上海会议:前排(从左向右):杨文琪,总经理,台北101大楼;郑时龄,教授,同济大学/院士,中国科学院;曾伟明,首席执行官,平安金融中心;顾建平,总裁/总经理,上海中心大厦;沈东,常务总经理,苏州中南中心;吴洋,首席执行官,外滩金融中心;罗能钧,副总经理,中信和业投资有限公司/中国尊 中排(从左向右):罗谦信,执行总监,香港置地;安东尼·伍德,执行理事,CTBUH;Timothy Johnson, CTBUH主席/设计合伙人, NBBJ; David Malott, CTBUH新任主席/合伙人, Kohn Pedersen Fox; Mounib Hammoud, 首席执行官, 吉达金融中心/王国大厦; Robert Pratt, 总经理, 铁狮门房地产 后排(从左向右):李振宇, 院长, 同济大学; 贾朝晖, 副总建筑师, 绿地集团; 叶一成, 集团执行官, 森大厦(上海)有限公司/上海环球金融中心; 何荣业, 设计部总监, 新世界发展有限公司; Yoshinori Kotera, 总监, APP(中国)/金光中心; 郝继霖, 副总经理, 深业置地有限公司

Why China?

Why hold the CTBUH Conference in China, after having done so two years previously? China is the world's most active tall building market, by far. By the end of 2015, it is estimated that one in three buildings taller than 150 meters in the world will be located in China. With roughly 250 million people set to move into Chinese cities in the next decade or so, the pace of urban construction, including road, rail, water infrastructure and cultural institutions, in addition to tall buildings, has outstripped any previous period in human history. Many of the iconic towers now rising in China have lent world recognition to cities that relatively few Chinese – let alone Westerners – were previously aware of. These mega-projects have provided a global stage for Chinese cities and companies, and a veritable creative “playground” for Western architects faced with a much more conservative building climate at home. This has gone hand-in-hand with the rise of a middle class that never before had the kind of purchasing power it does now. The change wrought by urbanization has been nothing short of breathtaking.

With global urbanization approaching 200,000 people every day, the need for a new or extended city of a million inhabitants every week is driving massive growth in hundreds of Asian cities simultaneously, including in China. In 2014, for the seventh year in a row, China had the greatest number of tall-building completions of any nation. A total of 58 two-hundred-meter-plus buildings were completed in China – 60 percent of the global total – up from its previous record of 36 in 2013. Some other quick facts communicate China's massive role in the worldwide tall-building community:

- Of the current 20 tallest completed buildings in the world, 10 are in China.
- Of the current 100 tallest buildings in the world, 34 are in China.
- Of the future 20 tallest buildings in the world, as of 2020, 13 will be in China.
- Of the future 100 tallest buildings in the world, as of 2020, 55 will be in China.

代表们通过会议现场领取到的材料, 可以更容易地了解整个会议的详细日程安排。参会代表领取到的手提包里面包含了四本大的精装书籍, 包括一本内含116篇针对每个分会主题的会议主论文集和三本深入解读书物(分别是上海中心大厦、平安金融中心和苏州中南中心), 另外还有收录各个分会演讲PPT文件的优盘。毫无疑问, 没有人会空手或者收获甚少地离开上海。这本会后报告将会聚焦这次会议的亮点, 向大家展示这次全球对话的规模和质量。

为什么是中国?

在两年前已经在中国举办过会议之后, 为何再次选择中国作为CTBUH会议召开地点? 因为中国是目前世界上最活跃的高层建筑市场。据估计, 截止至2015年底, 世界上高度超过150米的建筑将有三分之一坐落于中国。未来十年间, 中国将有2.5亿的人口涌入城市, 城市将以人类文明史上前所未有的速度高速发展。除了高层建筑的建设之外, 也包括公路、铁路、水利基础设施和文化产业基地的建设。中国目前建设的许多标志性高楼都让它们所在的城市备受世界瞩目, 而在此之前不用说西方人, 连中国人自己都很少关注这些城市。这些超大尺度的项目不仅为中国那些曾经默默无闻的城市与企业提供了一个全球性的舞台, 更为那些被本国保守的建筑创作

The Future Three Tallest Buildings in China

三座未来中国最高建筑

After a brief word of welcome from outgoing **CTBUH Chairman Timothy Johnson**, **Professor Shiling Zheng of Tongji University**, and **Yao Jiang, Chairman of Shanghai Tower**, any remaining torpor from the previous night's reception was blasted away by an invigorating performance from a traditional Chinese drum troupe.

Though admitting that the drum performance was a hard act to follow, **CTBUH Executive Director and Illinois Institute of Technology/Tongji University Architectural Professor Antony Wood** nevertheless cast the opening plenary session in an appropriately significant light. Referring to speakers **Jianping Gu, President of Shanghai Tower**, **Wai Ming (Thomas) Tsang CEO of Ping An Finance Center Construction**, and **Dong Shen Deputy General Manager of Zhongnan Group**, he said: "I don't think there has ever been a time in which the developers of three megatall buildings have presented on stage together." Of course, the three had already been seen together earlier that morning, along with many of the other key speakers, at the VIP photo session in front of the CTBUH Skyline Background (see page 5), but the point was still valid.

Jianping Gu took the stage first, characterizing the twisting, sinuous form of the Shanghai Tower as a "back to nature" project. Although the building is the height of sophistication in terms of double-skin façade, elevator and outrigger technology, among many other feats, at its core it is an attempt to create a new template for community spaces, by making the project's atria stand in as a proxy for the small neighborhood meeting places that have been lost with much new urban development. Gu referred to the "stereoscopic" three-dimensional design of the project as being conducive to supporting human connectivity.

"All architects and investors pay a lot of attention to exterior shape and design," Gu said. "We also thought about harmony with the surrounding ambience. If you compare Shanghai Tower to Taipei 101, Petronas Towers, those were all isolated. There were already two towers in the vicinity when we started. We had to pay particular attention to harmonizing with those buildings. We consider this an issue of sustainability."

会议伊始，首先由即将卸任的**CTBUH主席 Timothy Johnson**与**同济大学的郑时龄教授**以及**上海中心主席蒋耀先生**分别为大会作了简短的欢迎致辞。紧接着，来自中国传统鼓乐艺术团的一场充满活力的表演将前一天晚上酒会给代表们带来的所有疲惫一扫而空。

虽然不得不承认鼓乐表演让开幕仪式达到高潮，但是**CTBUH执行理事、伊利诺伊理工大学/同济大学建筑教授安东尼·伍德先生**的演讲仍然成功地让会议代表们的注意力重新聚焦到了开幕全体大会的内容上。他在谈到三位演讲者的时候，即**上海中心总裁顾建平先生**、**平安金融中心首席执行官曾伟明先生**以及**中南集团副总经理沈东先生**，说：“我认为以前从来没有过这样一刻，能够让三座巨型高层建筑的顶级开发商们齐聚一堂。”当然，这三位领导和许多其他主要演讲者一道已经于今天早晨早些时候在CTBUH天际线前的VIP合影环节中见过面了，不过安东尼先生的表述仍然是十分贴切的。

首先登台演讲的是顾建平先生，他指出上海中心大厦项目扭转、弯曲的形态是一种“回归自然”的体现。虽然在双层外墙、电梯、悬臂桁架技术和许多其它方面取得的突破而言这座大楼是高度复杂的，但是其核心理念仍然是成为一个重塑社区公共活



Jianping Gu, President, Shanghai Tower, discusses harmonizing the Shanghai Tower among the existing two supertall towers adjacent.

上海中心总裁顾建平先生正在探讨让上海中心大厦与场地周边现存的两座超高层大楼和谐共存的问题。



Wai Ming (Thomas) Tsang, CEO, Shenzhen Ping An Finance Center Construction, addresses the design of the Ping An Finance Center revolving around sustainability.

平安金融中心首席执行官曾伟明先生正在围绕可持续性话题讲解平安金融中心的设计。



Dong Shen, Deputy General Manager, Zhongnan Group, discusses the Zhongnan Center being the first of many modern architectural buildings within Suzhou.

中南集团副总经理沈东先生正在探讨中南中心大厦将成为苏州未来众多现代建筑中的首例。



Delegates were welcomed with a performance from a traditional Chinese drum troupe.
会议代表们在欢迎仪式中观赏中国传统鼓乐艺术团带来的表演。

This line of thought informed the very careful selection of the building's height of 632 meters – 140 meters higher than the neighboring Shanghai World Financial Center, which itself is 70 meters higher than the Jin Mao Tower. Thus the three towers now form a tightly-calibrated tripartite formation, defining the Pudong new Central Business District.

Perhaps no other city embodies the rapidity of Chinese urbanization like Shenzhen, which has grown from a sleepy fishing village into a city of 14 million in little more than 30 years. It is here that the 660-meter Ping An Finance Center is being built, on a construction site that, on the occasion of Wood's last visit, was "so clean, it felt as if you could eat your lunch off any horizontal surface."

As demonstrated by the next speaker, Thomas Tsang, the Ping An project is a tour de force of complexity, driven by seismic and wind considerations, as well as the massive investment and attendant expectations of a single occupier.

"From the start, the owners were determined to have a high-performance, sustainable building that epitomized their corporate values," Tsang said. "The focus centered around three main areas: an effective vertical transportation system, an energy-efficient façade and high indoor air quality."

Tsang gave a brief overview of the architectural features that resulted from this remit, including the tower's widened base, to increase structural stability; a tapered profile, to reduce seismic and wind forces acting on the structure; shaped corners, to improve aerodynamic performance, and a megastructural system as a means of achieving economic structural resiliency that would be economically effective.

"I don't think there has ever been a time in which the developers of three megatall buildings have presented on stage together."

"我认为以前从来没有过这样一刻，能够让三座巨型高层建筑的顶级开发商们齐聚一堂。"

Antony Wood, CTBUH Executive Director and Illinois Institute of Technology/
Tongji University Architectural Professor
安东尼·伍德，CTBUH执行理事、伊利诺伊理工大学/同济大学建筑教授



CTBUH Executive Director and IIT/Tongji University Architectural Professor Antony Wood, welcomes conference delegates and gives a brief conference overview.

CTBUH执行理事、伊利诺伊理工大学/同济大学建筑教授安东尼·伍德先生欢迎参会代表并就会议总体内容发表简短演说。

动空间的范例。上海中心的中庭将成为小的社区活动空间存在的另一种形式，而这类空间已经在很多新的城市开发项目中消失了。顾先生还介绍了项目中的“立体”三维设计有助于增加人与人之间联系。

顾先生还谈到，“所有的建筑师与投资者都非常关注外形的设计，除此之外我们还考虑了建筑与周边环境的和谐共处。如果与上海中心相比，我们会发现台北101大厦和吉隆坡双子塔都是与周围环境隔离开的。在我们项目开始的时候，这片区域已经有两座高层建筑存在。我们不得不特别考虑如何与这些建筑和谐共存。我们认为这也是与可持续发展相关的一个问题。”

这一系列的思考也使得我们非常谨慎的选择了632米作为大厦的高度——这将使上海中心比隔壁的上海环球金融中心高140米，而上海环球金融中心又比旁边的金茂大厦高70米。由此，这三座大厦定义了浦东新中央商务区的超高层建筑现在形成了一种紧密的三足鼎立之势。

可能没有其它城市能够像深圳一样将中国的城市化进程进行的如此迅速。深圳只用了30年多一点的时间就从一个无人关注的小渔村发展成为了一座拥有1400万人口的城市。在伍德先生上一次参观660米高的深圳平安金融中心的施工现场时表示，“这里非常干净，以致于让你觉得在任何一块地面上享用午餐都没有问题。”

正如后一位演讲者曾伟明先生所说的，平安金融中心项目是一项复杂度极高的杰出作品，不仅在防震和风工程方面如此，同时也体现在平安集团作为唯一的建筑使用者所投入的巨资和对高标准服务的要求。



FOCUS:

Robert Pratt

Mounib Hammoud

Timothy Johnson

Tall Buildings as International Investments 聚焦：高层建筑作为一项全球性投资

The investment landscape for tall buildings varies considerably around the world, as was indicated by the diversity of perspectives in the panel "Tall Buildings as International Investments."

Mounib Hammoud, new CTBUH Trustee and CEO of Jeddah Economic Co., brought new light on his Kingdom Tower project, which many think of as being an isolated work of singular ambition. In fact, Saudi Arabia has a housing shortage of 1.6 million units, and the Kingdom Tower is part of a much larger project called Kingdom City, a new city center that will provide development plots around the iconic tower. This development will help to alleviate the capacity issues facing one of the world's youngest countries, Hammoud said.

CTBUH Chairman Timothy Johnson had some news from a closed-door session at MIPIM this year: 2014 would be the first year in which \$1 trillion would be invested in real estate worldwide. But traditional investment models may be going by the wayside, with more private investment involvement where traditionally governments have been the heavy subsidizers. Johnson cited the efforts of his client, Eton Properties, and its project in the northern Chinese city of Dalian. About 2,000 residential units were built in the first phase, with the second phase comprising a retail podium, which was sold to Pavilion. The 400-meter SOHO tower onsite was developed last, and can also be sold to deliver equity to the project.

世界各地高层建筑的投资环境差别非常大，专题对话“高层建筑作为一项全球性投资”中所展现出的多样的视角也证明了这一点。**新任CTBUH董事兼吉达经济有限公司的首席执行官Mounib Hammoud**发表了有关王国塔项目的新观点。之前许多人都认为王国塔是一个巨大野心驱动下的孤立项目，然而事实上，沙特阿拉伯的住房缺口已达160万套，而王国塔只是一个更加宏大的项目——王国之城开发的一部分。王国之城将作为一个新的城市中心为这座标志性的塔楼周边提供一系列项目开发的机会。Hammoud说道，这个联合开发项目将帮助作为世界上最年轻的国家之一的沙特阿拉伯减轻住房容量不足的压力。虽然每位投资者都想在短期内获得收益，但是王国塔的投资者们有着更加长远的打算，其中包括创建一座新的、更宜居的、拥有可用公共空间的城市。Hammoud还提到迪拜



James Robinson, Executive Director of Hongkong Land Ltd., offered a brief history of the former island colony turned global financial powerhouse. Although one thinks of Hong Kong as the quintessential tall building city, in fact it has many height and plot-density restrictions, view corridors and political issues to negotiate when a tall-building development is on the table. With current rising demand for more office and hotel space, Hong Kong needs to reconcile with its mixed feelings about supertalls, Robinson said.

Panel Chair Robert Pratt, Managing Director, Tishman Speyer, concluded the opening introductions by looking at the recent history of the world's tallest buildings and pointed out that a common trend was the purpose-built tower which started again after a long hiatus with the Petronas Towers in Kuala Lumpur, Malaysia. ■

市区的成功也得益于哈利法塔的建成，而那里之前是一片空地。当然，不能否认的是自我追求也是原因之一——Hammoud 说道：“你总是想要在历史上留下些什么。”

CTBUH 主席 Timothy Johnson 从今年在 MIPIM 的秘密会议上带来的最新消息显示：2014 年，全世界对房地产的投资将首次达到 1 万亿美元。不过，传统的投资模式可能会慢慢被淘汰。Johnson 介绍了他的客户裕景地产集团的成就以及其在中国北方城市大连的项目。在该项目中，第一期工程建造了大约 2000 套住宅，二期工程建造了零售功能的裙房，裙房已经被出售给 Pavilion。场地中 400 米高的 SOHO 塔楼成为最后被开发的对象，并且也可以被售出来补充项目的现金流。虽然这种开发模式与中国以及其它发展中国家中许多政府主导的项目形成鲜明对比，但这可能才是未来可靠的开发模式。

香港置地公司执行总监 James Robinson 在会上简短地介绍了香港的历史，即从前岛屿殖民地转变成全球金融的能量源泉之一。虽然人们会觉得香港是一个典型的高层建筑之城，但事实上，每个高层建筑项目的规划都要面临许多对高度和容积率的限制以及对景观视线和政治问题的考量。Robinson 说道，随着目前对办公与酒店空间需求的不断增加，香港需要调和其对超高层建筑的复杂情绪。

铁狮门房地产公司总经理、专题对话主席 Robert Pratt 的演讲为开幕介绍做了总结。他在演讲中回顾了世界最高建筑近几年的发展历史，并指出了专属高层建筑的建造正在成为一个共同的趋势。这一趋势在马来西亚吉隆坡 Petronas 塔经历的长时间沉寂后再度兴起。■

Above: Session panelists (from left to right): Robert Pratt, Managing Director, Tishman Speyer; Mounib Hammoud, CEO, Jeddah Economic Company; Timothy Johnson, CTBUH Chairman/Partner, NBBJ; James Robinson, Executive Director, Hongkong Land Ltd.

上图: 专题对话嘉宾(从左至右): Robert Pratt, 铁狮门房地产公司常务董事; Mounib Hammoud, 吉达经济公司首席执行官; Timothy Johnson, CTBUH 主席、NBBJ 建筑事务所合伙人; James Robinson, 香港置地公司执行董事

Technical Building Tours

建筑技术参观



Delegates enjoy examining the construction site of the Bund Finance Center.
参观代表们正在外滩金融中心的施工现场认真考察

Several hundred delegates spread out around Shanghai for the technical building tours on the final day of the conference. With 13 buildings on offer, and the chance to undertake tours in both morning and afternoon, this “transplant” of the conference venue in real buildings around the city greatly increased the learning experience.

The visit to the **Bund Finance Center**, a focal project of the Conference’s second plenary, included a visit to the Jiushi Headquarters by Foster + Partners, the Bund Finance Center’s architect, where delegates viewed a presentation on the overall project. A tour of a show suite also followed.

The **Jin Mao Tower**, adjacent to the conference venue, provided ample opportunity for exploration. Delegates toured the building, including the lobby, office section, top floor, observation deck, refuge floor, and parking area, as well as the “back of house” of the 5-star Grand Hyatt, affording a unique perspective on the Conference hotel.

At the **Jing An Kerry Centre**, the overall sense of luxury was amplified by traveling through the lushly appointed lobby and convention spaces of the Shangri-La Hotel on-site, while several empty office floors were also on view in both towers. The office levels have raised floors for more efficient mechanical and electrical distribution, and 2.9-meter vertical clearances.

The curvaceous **L’Avenue** hosted delegates with a presentation followed by a tour of the 5th floor office lobby, the 15th floor business center, and the 17th floor refuge area. This was followed by the basement car park, civil defense area, and plant room, and a tour of the shopping mall, containing an event space with a digital wall, atrium and glazed roof.

The **Lujiazui Harbor City Development Tour**, a 250,300 square-meter development on the site of the Shanghai Shipyard Factory and Drydock. After presentations by CITIC, KPF and Arquitectonica, delegates toured construction sites at Riviera TwinStar Square and CITIC Rubio Tower 3.

在会议最后一天的上午和下午，数百名会议代表在技术参观之旅中游览了位于上海不同地区的13座高层建筑。这种将会场“移植”到城市实际建筑中的形式极大地提升了代表们在会议中的学习式体验。

外滩国际金融中心是本次会议第二天全体大会的重点介绍项目，对这一项目的参观之行还包括了参观其主持建筑师诺曼福斯特设计的另一个项目——久事公司总部，在那里代表们听取了关于整个项目总体情况的汇报，之后还参观了项目展览专区。

金茂大厦紧邻此次大会会场，所以代表们实际上有很多机会可以参观这一项目。参观团队在参观了大厅、办公区、顶层、观景台、避难层和停车场之后，还参观了五星级金茂君悦大酒店的办公后勤区域。本次参观之旅让大家对本届会议所在的酒店有了更加独特的认识 and 了解。

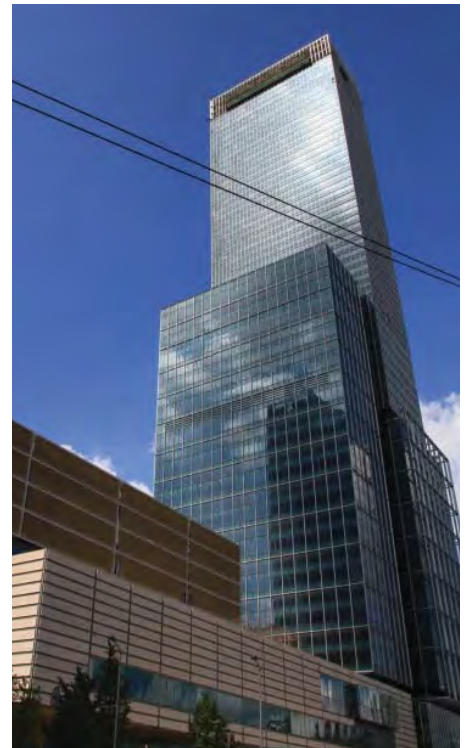
代表们在参观**静安嘉里中心**时，当穿过香格里拉大酒店的豪华大厅和宴会空间时，体会到项目所要传达的奢华理念被展现得淋漓尽致，尽管也能看到两座塔楼里面尚有数层办公楼层还未出租出去。为了更加高效的排布机械和电力系统，办公楼层将楼板提高，并且将每层净高设为2.9米。



Tour 1. Bund Finance Center © Foster Partners
参观1.外滩国际金融中心 © 诺曼·福斯特事务所



Tour 2. Jin Mao Tower © Skidmore, Owings & Merrill
参观2.金茂大厦 © SOM建筑设计事务所



Tour 3. Jing An Kerry Centre
参观3.静安嘉里中心

The tour of the **Shanghai Arch** began with a brief look at the building's exterior, emphasizing sculptural features. A footbridge to the main entrance spans an inverted "pyramid," a shape that repeats in the main lobby, in the form of a canopy, covering the main reception desk. The tour also visited the 33rd-floor skygarden, as well as the Shanghai Arch Village, which will provide shopping and dining options, and public green spaces.

At the **Shanghai International Finance Center**, attendees toured hotel spaces, an unoccupied office floor, back-of-house and technical facilities including a tower mechanical floor, and the top-floor bar and restaurant.

在参观具有曲面表皮的**尚嘉中心项目**时，代表们先是听取了项目介绍，之后实地参观了位于5楼的办公大厅、位于15楼的商务中心 and 位于17层的避难层，同时还参观了地下停车场、人防区和机房，同时还参观了购物中心和设有数字墙壁、中庭和玻璃屋顶的公共活动空间。

约有40位代表参加了**陆家嘴滨江金融城**的参观团，该项目位于上海造船厂与干



Tour 4. L'Avenue © Leigh & Orange
参观4.尚嘉中心 © Leigh & Orange



Tour 5. Riviera TwinStar Square © Rogan Coles
参观5.浦江双辉大厦 © Rogan Coles

The Council on Tall Buildings and Urban Habitat (CTBUH) is the world's leading resource for professionals focused on the inception, design, construction, and operation of tall buildings and future cities. A not-for-profit organization based at the Illinois Institute of Technology, Chicago, with an Asian office at Tongji University, Shanghai, the group facilitates the exchange of the latest knowledge available on tall buildings around the world through events, publications, research, working groups, web resources, and its extensive network of international representatives. At the same time, the Council's research department is spearheading the investigation of the next generation of tall buildings by aiding original research on sustainability and key development issues. Its free database on tall buildings, The Skyscraper Center, is updated daily with detailed information, images, data, and news. The CTBUH also developed the international standards for measuring tall building height and is recognized as the arbiter for bestowing such designations as "The World's Tallest Building." This Post-Conference Report encapsulates the session content, networking and technical tours that took place over the four days of the unprecedentedly successful 2014 CTBUH International Conference which took place in Shanghai from 16-19 September.

世界高层建筑与都市人居学会(CTBUH)是专注于高层建筑和未来城市的概念、设计、建设与运营的全球领先机构。学会是成立于1969年的非营利性组织，总部位于芝加哥伊利诺伊理工大学，同时在上海同济大学设有亚洲办公室，学会的团队通过活动、出版、研究、工作组、网络资源和其在国际代表中广泛的网络促进全球高层建筑最新资讯的交流。同时，学会的研究部门通过开展在可持续性和关键性发展问题上的原创性研究来引领新一代高层建筑的调查研究。学会建立了免费的高层建筑数据库——摩天大楼中心，对全球高层建筑的细节信息、图片及新闻进行每日即时更新。此外，学会还开发出测量高层建筑高度的国际标准，同时也是授予诸如“世界最高建筑”这样头衔的公认仲裁机构。会后报告回顾了为期四天的CTBUH国际会议的分会、社交活动与技术参观的内容，这次空前成功的会议于2014年9月16日到19日在上海召开。



Council on Tall Buildings and Urban Habitat
世界高层建筑与都市人居学会

S.R. Crown Hall
Illinois Institute of Technology
3360 South State Street
Chicago, IL 60616

Phone (电话): +1 (312) 567-3487
Fax (传真): +1 (312) 567-3820
Email (电子邮箱): info@ctbuh.org
www.ctbuh.org

CTBUH Asia Headquarters Office (CTBUH亚洲总部办公室)
Room 103 Wenyuan Building, College of Architecture
and Urban Planning, Tongji University
1239 Si Ping Rd, Yangpu District, Shanghai, China 200092
同济大学建筑与城市规划学院，文远楼103室
中国上海市杨浦区四平路1239号 200092

ISBN 978-0-93949343-2



9 780939 493432 >