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. This Post-Conference Report encapsulates the session content, networking, and off-site programs that took place over the six days of the highly successful 2017 International Conference in Sydney, Melbourne, and Brisbane, Australia, from 29 October – 3 November.

Through presentations on all aspects of building better, more connected cities, this global gathering examined the overall responsibility of the built environment to benefit society at large in the face of climate change, population growth, and other challenges. These important messages were delivered by not only designers and developers, but leaders in national, state and local government, referencing many of Australia’s most innovative urban developments as case studies. The massive scope of the subject matter was reflected in the conference programming, which encompassed nine parallel speaking tracks, featuring concurrent sessions on issues ranging from urban policy and transit-oriented development, to the use of timber in high-rises and vertical schools.

In total, some 1,200 delegates from 450 companies and 44 countries attended the conference, while 246 presenters shared their expertise through this high-caliber global platform.

CTBUH 2017
International Conference
Australia • 29 October–3 November
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CONFERENCE OVERVIEW

Connecting the City: An Introduction

Spanning six days across three of Australia’s most industrious cities, the CTBUH 2017 Conference was convened to fuel an industry-wide discussion on the vital role tall buildings, density and infrastructure play in connecting cities and unifying the populace. Over 1,200 delegates from 45 countries converged upon Sydney, Melbourne, and Brisbane, representing every sector of the industry, from owners, developers, and contractors to architects, planners, and engineers.

Through nine tracks across eight sessions in just the first two days, plus a full schedule of off-site visits and regional programs, this global gathering examined the overall responsibility of the built environment to benefit society at large in the face of climate change, population growth, and other challenges.

The massive scope of the subject matter was reflected in the conference programming, which encompassed nine parallel speaking tracks, featuring concurrent sessions on issues ranging from urban policy and transit-oriented development to tall timber and vertical schools.

In addition to these sessions, attendees participated in panel discussions led by some of the world’s most accomplished architects, developers, and builders, who addressed several timely topics, including the state of modular construction, the future of the workplace, and the retail experience.

But programming was not confined to meeting rooms and auditoriums. A number of off-site programs and walking tours were held across Sydney, allowing delegates to explore some of the city’s most iconic landmarks first-hand. One such landmark was the world-famous Sydney Opera House, where participants learned of the unique methods used to preserve the historic building. For the more engineering-minded, a walkthrough of Cermak Peterka Petersen’s wind tunnel testing facilities provided a behind-the-scenes look at how wind tests are conducted for complex building forms. The Harry Seidler Walking Tour highlighted the large open plazas and prominent artwork featured in five of the architect and successor firm’s most influential buildings.

Beyond Sydney, regional programs were held in Melbourne and Brisbane, where guests were treated to extensive tours of urban renewal projects such as Melbourne’s Docklands, where a major pedestrian thoroughfare is strengthening the precinct’s walkability and connectivity; and ultra-modern skyscrapers like Brisbane’s One One One Eagle Street, which achieved a 6-star Green Star sustainable design rating. Another popular tour was that of Melbourne Quarter, where delegates explored a multitude of commercial, residential, and cultural destinations, observing how a large-scale community-focused development can expertly balance public and private space to create an exciting and sustainable neighborhood.
Connecting the City: People, Density & Infrastructure

Twenty-one Conference VIPs, affiliated with some of the most prominent buildings across Australia and the world, gather on Day 1.

Front Row (left to right)

Yinju Li  
Vice President, Parkland Real Estate Development  
One Shenzhen Bay Tower 7  
Shenzhen, 2018  
341.4 m / 1,120 ft  
Future Eighth-Tallest Building in Shenzhen

Matthew Kuhn  
Development Director – Australia, Frasers Property  
One Central Park  
Sydney, 2014  
117 m / 384 ft  
CTBUH Best Tall Building Worldwide 2014

Matthew Khoo  
Deputy Managing Director, ICD Property  
EQ Tower  
Melbourne, 2017  
202 m / 663 ft  
Eighth-Tallest Residential Building in Melbourne

David Rolls  
Head of Development, Lendlease Australia  
International Towers Tower 1  
Sydney, 2016  
217 m / 712 ft  
First stage of Sydney’s largest urban renewal project: Barangaroo

Monica Barone  
CEO, City of Sydney  
The City of Sydney has 4.6% of Greater Sydney’s total population, but will increase by 36%, double the rate of Greater Sydney, by 2030.

Carl Schibrowski  
Head of Development – Australia, Brookfield Properties  
Brookfield Place  
Perth, 2012  
234 m / 769 ft  
Eighth-Tallest Residential Building in Melbourne

Irene Wai  
General Manager, Sun Hung Kai Properties  
International Commerce Centre, Hong Kong, 2010  
484 m / 1,588 ft  
Tallest Building in Hong Kong

Mark Tait  
Group Executive, Head of Commercial Development, Investa Property  
120 Collins Street  
Melbourne, 2019  
263 m / 869 ft  
Future Third-Tallest Building in Australia

Chris Kakoufas  
General Manager - Development, Chubs Property  
1 Bligh Street  
Sydney, 2011  
139 m / 455 ft  
CTBUH Best Tall Building Asia & Australasia 2012

Lê Yên Thi  
Managing Director, Lavenue Investment Corp.  
Lavenue Crown  
Ho Chi Minh City, 2121  
160 m / 525 ft  
Lavenue Investment Corporation’s Flagship Project

Back Row (left to right)

Jianbo Hu  
Executive Director, Ping An Real Estate  
Ping An Finance Center  
Shenzhen, 2017  
399.1 m / 1,266 ft  
Future Fourth-Tallest Building in the World

Anthony Henry  
Head of Workplace Design, Macquarie Bank  
50 Martin Place (Macquarie Bank HQ)  
Sydney, 2014  
56 m / 184 ft  
6 Star Green Star Rating

Irene Wai  
General Manager, Sun Hung Kai Properties  
International Commerce Centre, Hong Kong, 2010  
484 m / 1,588 ft  
Tallest Building in Hong Kong

Victor Meakins  
Senior Project Manager, Hongkong Land Ltd.  
Jardine House  
Hong Kong, 1973  
179 m / 586 ft  
Future Third-Tallest Building in Asia at Time of Completion

Raymond Cheah Ho Chee  
Chief Executive Officer, UEM Sunrise  
Aurora Melbourne Central  
Melbourne, 2019  
270 m / 885 ft  
Future Third-Tallest Building in Melbourne

Antony Wood  
CTBUH Executive Director  
Steve Watts  
CTBUH Chairman; Partner, alinea consulting

Joseph Chou  
Chairman, Taipei Financial Center Corporation  
TAIPEI 101  
Taipei, 2004  
508 m / 1,667 ft  

De Ming (Derry) Yu  
Project Director, New World China Ltd.  
Guangzhou CTF Finance Centre, Guangzhou, 2016  
530 m / 1,739 ft  
Fifth-Tallest Building in the World

Albert Chan  
Director of Development Planning & Design, Shui On Land  
Riverview Plaza A1  
Wuhan, 2016  
436 m / 1,430 ft  
Part of Wuhan Tiandi Site A, CTBUH Urban Habitat Award 2016

Simon Healy  
General Manager – Commercial Development, Mirvac Developments  
8 Chifley  
Sydney, 2013  
140.5 m / 461 ft  
CTBUH Best Tall Building Asia & Australasia 2014 Finalist

Connecting the City: People, Density & Infrastructure | 7
Opening Plenary

**Connecting the City: Sydney**

The Opening Plenary of the 2017 conference took place in the major ballroom in the Hyatt Regency Sydney, which, through its extensive window-wall had earlier treated delegates to a sparkling view of the morning sun on Darling Harbour as they filed in. Appropriately enough, attendees were feeling “connected to the city” in a way not usually achievable from inside a ballroom. After this short interlude, the blinds lowered and the program began.

In one of his last official duties as CTBUH Chairman, David Malott, Founder and CEO, delivered a few opening remarks to set the scene. “The theme of the conference this year is *Connecting the City,*” Malott said. “It’s about the ‘glue’ which holds the city together. In between the tall buildings, how do we support our quality of life? Largely, it’s our social fabric, the transportation infrastructure, and green space.”

The 2017 Conference was blessed with testimony from prominent figures in local and state government. The first of these was Anthony Roberts, Minister for Planning, Housing and Special Minister of State, New South Wales (pictured above). Roberts outlined the strides the state government had made in recent years towards ensuring better coordination between planning, infrastructure and private development, and towards an overall better quality of life, through New South Wales’ Better Place Policy. Essentially, this meant making design a high priority in planning considerations, and enhancing the power of government to enforce construction permits that so that they actually reflect approved planning applications.

Roberts called out several developments covered in the conference program as exemplars of a higher-minded, more collaborative process between government and private enterprise, including Central Park, Martin Place, and Barangaroo, which he said “had design excellence as a guiding principle. This commitment was established to guide all design decisions. It did not just mean designing good buildings, but delivering a public domain that supports healthy lifestyles. This was achieved through facilities for walking and cycling, as well as passive recreation.”

In closing, Roberts challenged the audience to help government turn the page on a previous era: “There is a lot of cynicism based on previous governments and interactions with the planning system,” he said. “We have had buildings of little design and poor form, made more for profit than livability. People are cynical about government and the ability of high-rises to deliver connected, livable communities. So the challenge for
Monica Barone, CEO, City of Sydney, who assertively articulated the ways in which the city was working toward its Sustainable Sydney 2030 goal of becoming “Green, Global, and Connected.” Barone described the sustainability plan as the culmination of an 18-month process of public consultation to ascertain how the plan could meet with the values of the citizenry. She pointed out that such plans cannot be monolithic, because cities are not monolithic. For example, the goal of reducing carbon emissions in the Sydney CBD, where the biggest carbon contributors are buildings, would be implemented in a totally different way from Western Sydney, where the biggest contributors are vehicles.

Nevertheless, in recognition of the diverse array of services, people and places that must interact in a major city, the sustainability plan also calls for better coordination between city departments, and between the three levels of government in Australia.

“People don’t live in silos or portfolios – they live in places,” Barone said. “You don’t get up in the morning and say, ‘today I am going to use the transport system, tomorrow education, and the next I’ll shop or go out to dinner.’ Public safety is not just a policing issue, but a design issue. The problem of obesity is not just a health department problem; it also lies with transport and the way we plan our cities. People not being able to walk and cycle contributes to poor health outcomes.”

Barone pointed out the city’s commitment to international agreements such as the Rockefeller 100 and C40 climate accords, as well as having had a carbon-neutral CBD since 2011. Barone credited a coalition of institutional property owners, representatives of many of which were in the room, with reducing emissions in the CBD by 47% since 2006, and saving AU$32 million in energy costs, by committing to sustainability initiatives over the past decade.

Praise for the city’s development community was balanced with a gentle reminder about who government was ultimately “for.” In describing how the city’s Sun Access Plan had released three million additional square meters of residential and floor space for high-rise development, Barone asserted, “Developers know the value of property comes from its context – which is the public domain.”

“When they come to see us, of course, when they want to encroach just a bit on public right of way, take just a few trees, just a sliver of park… it’s always a question of ‘how much can it hurt?’,” Barone said. “But those little bits add up. And if we didn’t say ‘no’ sometimes, we’d end up with no parks, no trees, and no sunlight.”

The plenary next moved from the framers of planning policy to the executors of the developments within that framework – the architects behind three of the central city’s biggest projects, for the Conference Diamond Sponsor developers, AMP Capital, Lendlease, and Brookfield.

Kim Nielsen, Founder, Principal, and Creative Director, 3XN, described how his design for Quay Quarter Tower would be an act of “humanizing the high-rise.” Situated on a sloping site on the approach to the Circular Quay ferry terminal, the project will reuse an existing 1970s office tower as the launchpad for a daring form of cantilevering floor plates, which will yield multiple sky gardens, multi-story communal spaces, and optimal views and sunlight access – in addition to doubling the amount of floor space.

Monica Barone, CEO, City of Sydney describes the goals behind the Sustainable Sydney 2030 initiative.

Kim Nielsen, Founder, Principal, and Creative Director, 3XN, shares the design brief for Quay Quarter Tower, Sydney.
Off-Site Programs

On the third day of the Conference, each delegate could attend two of 14 possible off-site programs around Sydney. In each program, delegates heard from colleagues on a specific topic related to the program location and larger Conference themes through on-site presentations, followed by extensive tours of the sites led by professionals involved in the projects.

Organized by the Sydney Metro, the City-Shaping Infrastructure Delivered at High Speed program explored the potential of the Sydney Metro North West transit project to transform the urban landscape. The prospect of trains arriving every four minutes to eight new stations in a high-growth suburban area has already led to some new mixed-use, high-rise construction projects along the route. Delegates first gathered at Sydney Metro headquarters, then proceeded along the route by coach, stopping to view the terminal station at Cudgegong Road and an intermediate station at Castle Hill. As the population of Sydney is projected to grow by 900,000 more people by 2036, this new infrastructure will be important in connecting the places outside of the CBD. The North West line should be completed during the first half of 2019.

The Communal & Public Spaces in High-Rise Buildings program, organized by architects Rogers Stirk Harbour + Partners and developer Mirvac Developments, took place at 8 Chifley, a 24-story office building with several distinctive outdoor terraces. In order to achieve communal space and interconnect levels, the design of the tower incorporates vertical “villages”. These villages, ranging in size from 1,800 to 2,600 square meters, allow for collaboration and connectivity, which builds a strong sense of community within the workplace. Additionally, the design-development team wanted to avoid the traditional office model consisting of narrow hallways and an abundance of cubicles. To achieve this, mezzanines and voids were created to encourage the natural flow of sunlight, and several views of the outdoors – all of which delegates got to enjoy in person.

It’s an exciting time for the Sydney Opera House. Those attending the Contemporary Back-of-House (BOH) in World Heritage Buildings off-site program, organized by Arup, had the amazing opportunity to get an up-close and intimate journey through the history and the contemporary changes being made to this most beloved and iconic structure, completed in 1973. The current renovations’ three major objectives are to: improve access to the building (for wheelchairs and vehicles); upgrade the theater planning and technology; and upgrade the acoustics. Delegates were able to tour the halls and back-of-house spaces and heard from several of the project leads.

Double-Skin Façades: The Cutting Edge kindly organized by Architectus, framed the importance of 1 Bligh Street in the context of urban development in Sydney. The building boasts a number of firsts for the Australian market, including a double-skin façade, a fully automated shading system, a full-height naturally ventilated atrium with breakout spaces, solar thermal tubes, and a tri-generation system. Delegates learned that the lack of external columns along the double-skin façade...
optimized the amenity for occupants by facilitating continuous perimeter offices and creating a high degree of equitable floor space. In addition to experiencing the stunning central atrium that runs the length of the building, delegates also toured the Executive Center on floor 26, the roof garden on floor 28, and a mechanical floor.

Participants in the *Greening the City* off-site tour of One Central Park (OCP), hosted by Frasers Property, was able to take in numerous perspectives of the building, and to understand it in the context of the larger Central Park development, a mixed-use project constructed on the grounds of a former brewery. The theater lounge/coffee bar offered views of the planting beds extending out beyond the glass façade, and to the adjacent Central Park beyond. Delegates heard from a project architect about some of the building’s key features, including the design and construction of the massive cantilevered heliostat, water recycling/treatment system, and district tri-generation plant. Other highlights included a visit to the building office for a viewing of the precinct model, and the private cantilevered Skydeck on the 29th floor. Attendees soaked in the views of surrounding Sydney and looked down on the heliostat, which cantilevered even further beyond the Skydeck just below.

No architecture firm has had a greater impact on the development of Sydney’s high-rise urbanism than Harry Seidler and Associates. The *Harry Seidler Walking Tour*, organized by Harry Seidler & Associates and hosted...
Program – Day 4

On the fourth day of the conference, delegates made their way southward to the world’s most livable city, Melbourne, for a second round of off-site tours, social events, and presentations. The Melbourne Program included representatives of state, local, and regional planning authorities, as well as think tanks on planning and infrastructure, which shared their visions for the city, as well as the challenges posed by nationwide issues like population growth and aging infrastructure.

After words of welcome by Giorgio Marfella, Lecturer, University of Melbourne, Larry Parsons, Director of Design, Ethos Urban, opened the first session of the program with a critical look toward the near future. With Melbourne’s population expected to grow from 4.5 to 8 million people by 2050, “a dramatic construction effort” is needed to accommodate the new urban dwellers, and that effort, Parsons said, must be vertical. While he acknowledged this effort will be a mammoth one, he was nonetheless heartened by what he is already seeing. “Victorians are adapting to apartment living and are trading living space for proximity to work, services, and city life,” Parsons observed.

Jonathan Spear, Executive Director, Infrastructure Victoria, shared Parsons’ vision of the future, and used his stage time to deliver an overview of the State of Victoria’s 30-year Infrastructure Strategy. Delving into the Strategy’s development process, he explained the consultative, evidence-based approach his team took to uncover key insights and recommendations for synergizing infrastructure and density.

“A central goal of this significant planning effort was identifying specific opportunities to achieve measurable social, economic, and environmental outcomes,” said Spear.
Program – Day 5

The second day of programming saw delegates flock to the Melbourne School of Design at Melbourne University for 12 presentations on the city’s unprecedented development. With the large number of speakers, the sessions were split into two theaters and carried out simultaneously. While Theater 1 featured presentations in Session 3A: Planning for Rapid Growth in a Multi-Modal City, Theater 2 hosted those in Session 3B: Utilizing Challenging Sites in Compact Urban Cities.

Neil Stonell, Partner, Grimshaw Architects, got things moving in Theater 1 with a lecture on the importance of high-quality public transport systems in a rapidly growing global city. Stonell focused on the under-construction Melbourne Metro Tunnel, which he believes has the potential to become a true connector and support the future growth of the city. Compared to other Australian cities, Melbourne has seen a remarkably steady increase in public transport patronage over the last two decades, he noted.

“Metro rail offers an efficient, reliable solution, with the ability to move significant numbers of people very quickly,” Stonell said. “Metro stations also act as catalysts for future growth, and offer a minimal footprint with maximum effect… Integrating metro stations into an existing city fabric must be a key early design consideration to reap the benefits that such infrastructure offers.”

Gianluca Racana, Director, Zaha Hadid Architects, furthered the discussion of rail stations as urban catalysts by offering several global case studies showing how transport infrastructure design can transform station buildings into destinations in their own right.

“Rail stations are not only transportation projects, but citywide social and economic catalysts that require creative thinking and creative placemaking,” Racana said. “As passenger numbers increase, rail is playing a central role in urban life again, and the economic and cultural importance of stations is increasing. A need for high-quality, beautiful, yet flexible stations, integrated into their urban context, has emerged.”

Such a renaissance would create multifunctional spaces where locals and tourists could congregate for inspiration, engagement, and opportunities, Racana said.

Toby Lodge, Principal, HASSELL, also recognized how integral transport is to any city, ultimately underpinning livability, connectedness, and economic performance. With some of the world’s most livable cities to the country’s name, Lodge said that Australian cities must continue to invest in high-capacity public transport in order to reach their full potential.

The best cities recognize the need for a “holistic mindset” to successfully translate aspirations and investment to greater livability and a higher-performing economy, said Lodge. “The movement network must be fully integrated with the fabric, activity, life, and experience of the city.”

Opening theater 2 was George Argyrou, Director, Hickory Group, who looked to the future from a construction perspective. Argyrou advocated for prefabrication as the key to constructing more sustainable, energy-efficient projects. Other benefits, Argyrou explained, include shorter construction schedules, quieter work sites, and the ability to overcome problematic urban sites.
City Programs – Brisbane

Brisbane Program Reveals a Transforming River City

The five-kilometer radius around the Brisbane CBD will grow by 50% in population and 25% in jobs by 2037. Sustainable design choices need to be made now. Source: John Flynn

Program – Day 4

On Day 4, delegates arrived in subtropical Brisbane, where the relaxed lifestyle quickly put everyone at ease. During the following two days, around 70 delegates heard nine presentations across three sessions, offering a comprehensive view of the key factors driving the extensive transformation underway in Australia’s third-largest city.

CTBUH Australia Queensland Chapter Chair John Flynn, Director, Conrad Gargett Architects, introduced the first session of the Brisbane program. Flynn noted that while the chapter was accustomed to holding breakfast seminars for 100 people or more, this was the first time it had hosted a two-day program. As he provided a rundown of the next two day’s events, it was clear that the sequence had been well-planned.

In the first presentation, “Brisbane as River City,” Malcom Middleton, Queensland Government Architect, Queensland Government, gave an overall context for understanding Brisbane as a river city. He couched its development history in a story of the interface between its winding river, the early 20th-century tramway network, and the small-scaled villages and “timber-and-tin” Queenslander houses, whose wide verandahs give the city a unique character. But the intention was not to preserve a historical postcard. Rather it was to suggest that Brisbane can grow in productive ways that capitalize on these built-in characteristics. It will grow regardless – the population of its inner districts is predicted to rise by 50% in the next 20 years, and add another 25% more jobs. Key to sustainable growth would be an increase in the number of river crossings, of which there are currently few.

“Brisbane can change itself – build another 10 bridges, you could fundamentally change the patterns of connection,” said Middleton, who described three interlocking development patterns – “knowledge city,” “river city” and “mosaic city” – that could lead to a sustainable future if properly linked by transit and built up at a human scale.

Robert Vider, Senior Practice Director, BVN Architecture, introduced delegates to the host building of the first session, 480 Queen Street. He described how the project was conceived from the beginning as connector between the riverfront and prominent sites atop a nearby escarpment, including St. John’s Cathedral. The result is that the project, while offering unusually large floor plates for commercial use, ultimately “pursued a broader agenda than the client’s interest alone,” Vider said. “We wanted to design a response to context that emphasized connections and relationships.”

The project developed so that the first five floors of the 32-story office building consisted of a series of platforms under the shelter of the building, which threaded the public realm through the site and a six-meter grade change. Along the way, the path, called “The Ravine,” is lined with retail and services, such as a child-care facility. Several pop-out plazas take pedestrians out of the traffic flow and allow them to contemplate the scenery or enjoy a meal.

Brendan Gaffney, Director, Cox Architecture, and Ian Ainsworth, Principal, Arup, gave a presentation on 111 Eagle Street, which the delegates would later tour. The tower’s distinctive diagonal bracing system, while appearing eccentric to the uninitiated, actually were the specific result of
applying an algorithmically-derived natural form to the challenging dynamics of the site. Gaffney described the project’s many encumbrances, including a pre-existing 15-story building that first had to be demolished; the remains of its loading dock and car park, which were to be maintained; the excavation of a new six-level parking garage with its attendant ramps, and the desire to maintain a permeable public ground plane between two well-known skyscrapers already on-site, part of a Harry Seidler master plan.

“Through the process of subtraction, there were very few places we could put the structure,” Ainsworth said. The resulting approach was to drive plunge columns down through the existing basement, and simultaneously excavate the new basement while building the tower above. In order to deliver large floor plates with good views, and to transfer loads to the limited number of set points, Cox and Arup tested nearly 1,000 iterations of an exoskeletal column system based on the growth pattern of the Moreton Bay fig, a local tree. The so called “fig-tree” frame, with columns tilting between 8 and 25 degrees from the vertical, is the tower’s distinguishing feature, giving it a lightweight yet powerful presence on the skyline, while leaving clear maximum amount of space at the ground plane.

Next, Chris Stevenson, National Construction Manager, Hutchinson Builders, introduced the Brisbane Skytower project, whetting the appetite of the audience to visit the under-construction building later in the day. In addition to becoming the city’s next tallest building, the Skytower is notable for its use of a moving formwork system. It is also being constructed in stages, with some residents moving into floors 1 through 40, up to a year before the rest of the building is complete to floor 88.

The reason for this is predominantly financial, Stevenson said. The time frame for repayment of financing determined interest costs. The sooner units could be occupied, the more quickly costs could be recouped. “There is an opportunity to recover 50% of the project cost/revenue to improve project feasibility,” he noted. “The staging meant that people who moved in to lower floors would have to be made aware in their sales contracts that they would be living in a construction site, and hoists would be going past them.”

Program – Day 5

On the second day, the program was held at the heritage building Customs House, which had an excellent view of the river from the verandah. The initial session focused on how tall buildings could be detailed to better achieve aesthetic and environmental goals. Perry Just, Senior Development Manager, Sunland Group, described the development and design process of the Abian residential tower, which involved complex façade geometry. Its flared, trumpet-like shape required several innovative moves. The first included façade panels that were not equilateral trapezoids, and whose glass would have to be bent in-frame. The design team used “cold warping,” a technique that deploys mechanical fixing to prevent the warped glass from creeping out of gaskets over time. This presented numerous transportation and fabrication issues, and added a high number of mullions to create smaller panels. The project also has a cantilevered façade extending from below level three, carrying laminated glass up to eight meters out from the building. In all, the project used 3,800 panels, 2,000 of which were unique, Just said.
Conference in Numbers

**Attendance by Region**

- **5%** Rest of World (60 No.)
- **10%** Europe (120 No.)
- **12%** Americas (144 No.)
- **24%** Asia (288 No.)
- **49%** Australasia (588 No.)

Total = 1200 Attendees

**Top 10 Countries in Attendance**

1. Australia 560
2. United States 128
3. China 103
4. Israel 38
5. India 37
6. United Kingdom 32
7. Singapore 30
8. Germany 29
9. Malaysia 29
10. Indonesia 26

Total number of Countries: 44

**Top 10 Cities**

1. Sydney 342
2. Melbourne 142
3. Brisbane 58
4. Hong Kong 54
5. Chicago 43
6. New York City 36
7. Tel Aviv 36
8. London 30
9. Mumbai 30
10. Singapore 30

Total number of Cities: 105

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About CTBUH

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. Founded in 1969 and headquartered at Chicago’s historic Monroe Building, the CTBUH is a not-for-profit organization with an Asia Headquarters office at Tongji University, Shanghai; a Research Office at Iuav University, Venice, Italy; and an Academic Office at the Illinois Institute of Technology, Chicago. CTBUH facilitates the exchange of the latest knowledge available on tall buildings through publications, research, events, working groups, web resources, and its extensive network of international representatives. 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.”
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. This Post-Conference Report encapsulates the session content, networking, and off-site programs that took place over the six days of the highly successful 2017 International Conference in Sydney, Melbourne, and Brisbane, Australia, from 29 October – 3 November.

Through presentations on all aspects of building better, more connected cities, this global gathering examined the overall responsibility of the built environment to benefit society at large in the face of climate change, population growth, and other challenges. These important messages were delivered by not only designers and developers, but leaders in national, state and local government, referencing many of Australia’s most innovative urban developments as case studies. The massive scope of the subject matter was reflected in the conference programming, which encompassed nine parallel speaking tracks, featuring concurrent sessions on issues ranging from urban policy and transit-oriented development, to the use of timber in high-rises and vertical schools.

In total, some 1,200 delegates from 450 companies and 44 countries attended the conference, while 246 presenters shared their expertise through this high-caliber global platform.