



## About the World Green Building Council

The World Green Building Council (WorldGBC) catalyses the uptake of sustainable buildings for everyone, everywhere. Transforming the building and construction sector across three strategic areas – climate action, health & wellbeing, and resources & circularity – we are a global action network comprised of around 70 Green Building Councils around the globe. Within our Regional Networks in Africa, America, Asia Pacific, Europe and Middle East and North Africa, Green Building Councils work together and share their knowledge and experiences to advance green and healthy building.

As members of the UN Global Compact, we work with businesses, organisations and governments to drive the ambitions of the Paris Agreement and UN Global Goals for Sustainable Development. Through a systems change approach, our network is leading the industry towards a net zero carbon, healthy, equitable and resilient built environment.

[www.worldgbc.org](http://www.worldgbc.org)



These awards are made possible with the support of our Regional Partners

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Your Dreams, Our Challenge

### Working Group Members

Jeff Oatman, Green Building Council Australia  
Ge Liang, China Green Building Council  
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Tito Aribowo, Green Building Council Indonesia  
Heidi Hui, Hong Kong Green Building Council  
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Ranjith Dissanayake, Sri Lanka, Green Building Council  
Dominika Czerwinska, World Green Building Council  
Nellie Cheng, World Green Building Council

## WorldGBC Asia Pacific Leadership in Green Building Awards 2020

The WorldGBC Asia Pacific Leadership in Green Building Awards showcases the businesses and innovators leading the way in sustainable buildings.

The biennial event, first held in 2014, celebrates Asia Pacific's brightest achievements towards a more sustainable built environment: buildings pushing the envelope in sustainability, inspiring companies, and strong female leadership.

An independent panel of high-profile judges assessed nominations from Asia Pacific Green Building Councils and selected winners in three awards categories:

1. The Business Leadership in Sustainability Award
2. The Women in Green Building Leadership Award
3. The Leadership in Sustainable Design and Performance Award

### **The Business Leadership in Sustainability Award**

The Business Leadership in Sustainability Award rewards companies which are truly integrating sustainability into their business models and contributing to the transition towards a sustainable built environment. These organisations understand that sustainability presents a long-term business opportunity, demonstrate sustainable practices within their internal and external operations, and show sustainability leadership.

### **The Women in Green Building Leadership Award**

Presented to an inspiring female leader within the sustainable building movement, this award recognises the pivotal role that women play in nurturing and activating their communities and delivering change.

### **The Leadership in Sustainable Design and Performance Award**

This award is presented to pioneering green building projects that set new benchmarks for sustainability. There are three sub-category winners for: Residential, Commercial and Institutional buildings.



# WorldGBC Asia Pacific Leadership in Green Building Awards 2020 Finalists & Winners

## Business Leadership in Sustainability Award

### FINALISTS

- Cundall (Australia)
- Godrej & Boyce (India)
- Ronald Lu & Partners (Hong Kong)
- Shenzhen Institute of Building Research Co.,Ltd. (IBR) (China)

### WINNER

Cundall (Australia)

## Women in Green Building Leadership Award

### FINALISTS

- Amie Lai (Hong Kong)
- Ye Qing (China)

### WINNER

Ye Qing (China)

## Leadership in Sustainable Design and Performance Award - Commercial

### FINALISTS

- Paramit, Factory in the Forest by Paramit Malaysia Sdn Bhd (Malaysia)
- Plant 13 Annexe by Godrej & Boyce (India)
- Shanghai Tower by Shanghai Tower Construction and Development Co., Ltd. (China)
- Victoria Dockside by Ronald Lu & Partners (Hong Kong)

### WINNER

Paramit, Factory in the Forest by Paramit Malaysia Sdn Bhd (Malaysia)

## Leadership in Sustainable Design and Performance Award - Institutional

### FINALISTS

- Chai Wan Campus for the Technological and Higher Education Institute of Hong Kong (THEi) by Ronald Lu & Partners (Hong Kong)
- Kampung Admiralty by WOHA Architects Pte. Ltd. (Singapore)
- The Twelve-Year School project in China-Singapore Tianjin Eco-city by Tianjin Eco-city Green Building Research Institute (China)

### WINNER

Chai Wan Campus for the Technological and Higher Education Institute of Hong Kong (THEi) by Ronald Lu & Partners (Hong Kong)

## Leadership in Sustainable Design and Performance Award - Residential

### FINALISTS

- Blue Bay International by Hengtong Construction Group (China)
- CoEvolve Northern Star by CoEvolve Estates (India)

### WINNER

CoEvolve Northern Star by CoEvolve Estates (India)

## Special Recognition

Recognition for Better Places for People: Cundall (Australia)

Recognition for Advancing Net Zero:  
Arthaland Century Pacific Tower by Arthaland Corporation (Philippines)



## Business Leadership in Sustainability Award Winner

### Carbon Positive

#### Action

16% reduction in workplace CO<sub>2</sub> emissions per person per annum from 3.7 down to 3.1 tonnes.

### Zero Carbon Energy

20% reduction in office energy intensity to 1153 kWh per person per year.

### Health and Wellbeing

Mental health first aiders at an 84% ratio to physical first aiders.

69% of employees covered by certified EMS.

### Ethics and Equality

Ethical bid/no-bid process commenced company wide.

### Materials and Supply Chain

Embodied impact assessments (Life Cycle Assessment) for projects commenced.



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## Cundall (Australia)

Cundall is a multi-disciplinary engineering and consultancy practice with a strong commitment to sustainability, providing people with the knowledge, skills and enthusiasm to make a difference in their homes, workplaces, projects, industry and community.

### Sustainability Commitment

Cundall has shown an enhanced commitment to reducing its impact on the planet by developing a sustainability policy, signed by all partners to establish clear objectives across four cornerstones:

1. Projects - To have every engineer and consultant in Cundall think about and deliver sustainable designs, using specialists as required, on every project.
2. Industry Leadership - To use knowledge and resources to help others embrace and deliver more sustainable outcomes.
3. Homes & Communities - To actively contribute to local and struggling communities and help staff (and their family and friends) lead more sustainable lives.
4. Workplace - To be a net positive business, engage and enthuse staff about environmental and social sustainability, and report transparently on performance.

The company's sustainability roadmap sets out clear targets, initiatives, action plans and indicators under six key impact areas:

- Climate Positive Action
- Zero Carbon Energy
- Health and Wellbeing
- Materials and Supply Chain
- Ethics and Equity
- Climate Adaptation

The roadmap is currently guiding Cundall to become a carbon positive company by 2025.

Cundall is one of 38 founding signatories of the Net Zero Carbon Buildings Commitment led by World Green Building Council. As a signatory, Cundall is required to evaluate its current energy use and associated emissions across all portfolios; identify opportunities to reduce energy wastage and improve energy efficiency; power its buildings from renewable energy sources; and report on progress against decarbonisation targets.

### Sustainability Influencer

But what makes Cundall a real leader is that it takes its sustainability agenda beyond its own operations and business. The company is fully embracing its role as a sustainability influencer to support its stakeholders to increase their ambitions and realise the wide-ranging benefits that action on sustainability brings.

For over 15 years the company has helped clients to exceed their sustainability goals on projects by combining innovation with practical and proven technologies, materials and design strategies.

To drive more sustainable projects for a better future, Cundall creates and provides its free The Beyond Report, to show clients how they can incorporate sustainability into their projects in ways they had not considered.

This tool provides detailed initiatives tailored to reflect the project typology, including examples of how sustainability principles can be applied to a project and explaining the benefits that they will yield.

The information present in the report gives clients a clear ideal of the potential places where value can be added to their project in a range of areas including: health and happiness, equity and local economy, culture and community, land and nature, sustainable water, sustainable food, travel and transport, materials, waste and zero carbon energy.

More information about Cundall's leadership is available at their annual Sustainability Report [here](#).





## Women in Green Building Leadership Award Winner

### Green Building Design

Design and review of dozens of green building projects, including 17 large-scale and ultra-large-scale projects with a total area of over 3 million square metres.

### Improving Women's Position

Committed to creating a fair working environment and providing welfare and facilities (such as kindergarten) for working mothers to help them balance their careers and families.

### Children's Health

Studies the influence of green lifestyles and green buildings on children's education and physical health, as well as the functional applications of green buildings at different times and in different spaces, bringing the reform of the national kindergarten design specifications in 2019.



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## Ye Qing (China)

Ye Qing is a well-recognised green building leader in China, having been an active practitioner in the field since 2000 and an ardent advocator of sustainability.

### Green Building Practice

As President and Chairman of the 700 staff at the Shenzhen Institute of Building Research (IBR), Ye Qing has driven the transformation of its main business into the green building field.

She has expanded the scale to industrial parks and community development, with participation in the design of over 60 million square metres of green buildings and the planning of 6,000 square kilometres of green cities in China; increasing IBR green business revenue by 100% to CNY 468 million (USD 66 million). The business model Ye Qing implemented has led IBR to become a pioneer in green city technology services.

IBR has provided Urban Ecological & Liveable Development Index assessments for 287 cities in China and is conducting research into green buildings for different climates and economic conditions, which has brought impact on large scale urban developments in China.

The IBR Headquarters, which serves as a national science education base and demonstration project, has received more than 66,000 visitors from all over the world and offers a sustainable option and cost-effective solutions for green building development.

### Advancing Green in the Nation

In 2005, Ye Qing initiated Shared Design, a methodology to bring the project owner and design team together to enable sharing and integration and to ensure a balance between people, nature, building, and the city, as well as inter-generational equity. Shared Design has now been incorporated into national standards, following its proven impact.

Using her position at major government committees and industry associations, Ye Qing has been a strong advocator for green in building industry, and society at large. She was a key member of the committee which was responsible for developing China's national green building policy, technical standards and rating systems, and served as the editor-in-chief for more than 10 national and industry standards. This includes the China Assessment Standard for Green Building, contributing to the formulation and revision of the standard with her expertise and experience in green building design.

With her participation in the development of the 2019 version of the China Assessment Standard for Green Building, Ye Qing introduced the ideas of "people-oriented design" and "five senses and six attributes", and extended the definition of green buildings to durability, service, health, livability, and suitability for all ages. This change enhances users' experiences and allows for a more systematic development of high-quality green buildings.

Under Ye Qing's leadership, Shenzhen established the first Green Building Association in China in 2008. The organisation played a pivotal role in the development of local green building industry, leading Shenzhen to the status of "Green Capital" in China.

### Knowledge Sharing

Regarded as a top expert in green building design, Ye Qing is a frequent speaker at national and international events, sharing her experience and knowledge. She has been invited by different cities to introduce the green development philosophy and case studies to provide guidance and ideas.

Understanding the importance of public awareness, Ye Qing makes many appearances at citizen forums to promote green and healthy buildings.

Ye Qing is a sought-after national expert for green consultation and evaluation. Her influence can be traced in many major development projects across the country.



## Leadership in Sustainable Design and Performance - Commercial Award Winner

**40%**

measured energy saving reductions achieved compared to the electricity bills of the old factory.

**7.1**

million liters of water reduction in potable water consumption.

**90%**

of the staff prefer the new factory over the old factory, as per an anonymous post occupancy survey – 34.4% for contact with nature; 33.5% for beautiful building design; 15.8% for conducive working environment.



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## Paramit, Factory in the Forest by Paramit Malaysia Sdn Bhd (Malaysia)

Paramit Factory, a 162,000-square-foot manufacturing facility of electronics medical and satellite equipment in Penang, is a case study in industrial biophilic design, which challenges the conventional typology that is too often mired in questions of functionality and cost.

The entire five-acre site is conceived as a forest that penetrates, surrounds and steps over the buildings, maximising contact with nature. “The factory in the forest” addresses the unique characteristics of the Malaysian climate and is designed to create maximum energy efficiency and reduce power requirements. All office levels give direct access to green roof gardens and both offices and the factory look into a large green-shaded courtyard that can be used for meetings and relaxation.

The factory’s design is focused on its 800 workers, integrating principles of passive design with complex climate-control systems to create a remarkable blend of space, light, views, and plants, backed by strong numbers on consumption and comfort. Daylight, greenery and vistas were key considerations from the start. The louvred canopy roof connects indoor with outdoor, delineating semi-covered landscaped spaces that are lush and green.

All personnel working in this building, both factory and office staff, have contact with nature in all its forms throughout the working day. The approach was to create a stimulating and meaningful working environment for all employees – with the forest to be the face of the building and company.

Sustainability was an integral part of the design. The cardinal climate responsive design principles were energy efficiency, water efficiency, daylighting and biophilia in order to address the fundamental human need for a connection to nature.

The building is designed to shield against the hot and glaring tropical sun, while allowing soft diffused natural daylight to filter into the building. The simulations and daylight measurements in operation show that the factory floor achieves an evenly day-lit work environment without glare throughout the year.

An innovative radiant floor cooling system with 65km of embedded PEX pipes in the concrete slabs throughout the factory and office makes the radiant floor slab cooling twice as energy efficient as conventional air-conditioning. Additional energy efficiency was achieved from energy recovery from the exhaust and separating the sensible and latent cooling. To alleviate flood risk from the tropical rainstorms, the building has an 800 m<sup>3</sup> stormwater retention tank as well as a 400 m<sup>3</sup> rainwater harvesting tank. In 2019, 61% of the rainwater harvested from the roof was used for irrigation, reducing the potable water consumption by 7.1 million litres of water.

Paramit’s remarkable “Factory in the Forest” has set a good example for industrial architecture in the tropics. The most important lesson is that for buildings to be environmentally friendly, they must respond to their site as well as to local climate, culture, architecture and technology. The spatial and psychological benefits of the natural landscape in architecture should not be undermined. The experience of seeing, touching, smelling and hearing the natural elements is fundamental to health and wellbeing.



## Leadership in Sustainable Design and Performance - Institutional Award Winner

**22%**  
improvement of annual carbon emissions over baseline.

**22%**  
of reduction on energy use compared to extant local energy code.

**49%**  
Potable water reduction and 55% annual sewage volumes reduction.

**75%**  
of the hardscape is pervious to lower the ground surface temperature.

**40%**  
of the site is covered by urban greenery for evapotranspiration to cool the ambient temperature.



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## Chai Wan Campus for the Technological and Higher Education Institute of Hong Kong (THEi) by Ronald Lu & Partners (Hong Kong)

THEi campus in Chai Wan, Hong Kong, was developed as a vertical community-centric green space for the vocational training school of THEi as well as the public who live, work and play in the neighbourhood.

### Green Connector between the Mountain and Sea

The attractive twin-tower building design — rarely seen in Hong Kong schools — provides a green environment with vertical gardens, a large greenhouse and high permeability of natural light and air to ensure a dynamic and engaging learning environment for students.

The green design focuses on the integration between the school community and the neighbourhood, preserving visual links between the neighbourhood and the harbour and mountain backdrops.

Adopting a twin-block design, the campus is opened to an adjacent public park and the prevailing summer wind, embracing the outdoor public green space and extending it vertically through "sky-rise greening" via various terraces and "pocket spaces" located on multiple levels. The open, barrier-free and welcoming perimeter of the campus proactively integrates with the existing public realm through new street furniture and urban greenery.

Sustainable features include a north-south building orientation, high building permeability, external shading and light shelves and a bioclimatic façade. The institute also improves the biodiversity of the neighbourhood, thanks to the introduction of over 30,000 trees.

A greenery coverage of about 35% is achieved, adding humane, soft touches to the spaces between the blocks. These spaces also enjoy high permeability of light and air and preserve sightlines, enhancing the livability of the campus and improving the environment of the neighbourhood.

### New Academia-Niche Industry-Community Innovation Hub

The purpose of the campus is to foster the exchange of ideas, not just within the closed boxes of the school community, but also in the natural environment with the neighbourhood. The design focuses on nurturing innovation with close academia-industry-community collaboration.

The interface between the campus and the public space is highly transparent and vigorously maintained to facilitate a constant visual dialogue. Facilities such as exhibition galleries, the greenhouse, classrooms, studios and workshops all adopt glazed façades facing public circulation areas, revealing the vibrant learning and teaching activities within.

### Campus Development as Lab and Showcase

The campus development was used as a teaching lab, providing students with opportunities to learn about green design, sustainable project management and green material through a real project.

The campus showcases a 280m<sup>2</sup> tailor-designed greenhouse for teaching and research purposes. The Faculty of Design and Environment holds various programmes on landscape architecture and uses the Greenhouse as a controlled environment and testbed to carry out experiments and trial plantings.





## Leadership in Sustainable Design and Performance - Residential Award Winner

**0**  
Water Discharge Community.

**65% - 25.2**  
million liters of freshwater saved annually.

**242**  
tons of Operational Carbon reduced annually.

**1738**  
tonnes of Embodied Carbon reduced.

**300,000kWhs**  
of electricity saving annually.



## CoEvolve Northern Star by CoEvolve Estates (India)

CoEvolve Northern Star is the highest rated green building in the state of Karnataka and a major sustainable venture in Bangalore.

The high-rise residential development focuses primarily on promoting sustainability to reduce the carbon footprint and foster the idea of circular living.

Rapid development in Bangalore has shown 525% growth of built up areas and 78% decline of vegetation. CoEvolve recognises the importance of marrying nature with the built environment to provide a positive impact on air quality and creating urban ecosystems. Therefore, CoEvolve has focused on limiting its footprint by building 1,125 square meters on a 6,316 square meters plot to achieve 82.8% open space, and introduced greenery at all possible levels.

The priority of this project was to conserve water as much as possible. Aggressive features were implemented to reduce the freshwater requirement by 65% – 25.2 million litres annually.

CoEvolve Northern Star separates sullage and sewage at the source, treating both separately. The treated sullage is further subjected to sophisticated tertiary treatment to almost bottled water standards and supplied for domestic purposes.

These initiatives along with a robust rainwater harvesting and reuse system make this development almost completely water neutral. The innovative water cycle has set benchmarks for other property developers to follow.

Passive design measures such as a cool roof, high-performance windows, heat-reflective paint, efficient lighting and lighting automation have been incorporated, contributing to saving over 300,000kWhs of electricity annually:

- Solar panels and Windmills – 30,000kWhs
- Gearless Elevators – 12000kWhs
- Electricity saved due to recycling of water – 35,000kWhs
- Zero electricity ECOSTP and greywater treatment plant – 33,000kWhs
- Zero Electricity Organic Waste Converter – 4,500kWhs
- High-performance glass cuts out heat while letting in light – 165,000kWhs
- All common areas are lit by LED lights – 13,000kWhs
- Common area lights controlled by network of timers and sensors – 10,000kWhs
- Gearless elevators with group control to optimise usage – 12,000kWhs
- Heat-reflective paint on roof and external walls – 1,700kWhs
- 5-star rated pumps and motors – 13,000kWhs

The energy savings were projected using computer simulation programmes and technical brochures of equipment, and the performance is monitored in real-time using water and energy metres with the data then published on the website.

Occupants' behaviour is key for a green-designed community. A homeowner's manual was therefore circulated to residents at CoEvolve to educate and help homeowners lead a sustainable lifestyle. Design and Horticulture consultants interact with residents regularly to create awareness regarding sustainable concepts and how to implement green measures in their daily life.

Holistic Design and biomimicry innovation inspired by nature have set CoEvolve Northern Star as an example in sustainability for local developers to follow.



## SPECIAL ACHIEVEMENTS

The goal of the WorldGBC Asia Pacific Leadership Green Building Awards is to seek out sustainability best practices from across the region and share them with others.

This year, our Jury wanted to recognise achievements by nominees who did not receive an award for their category, but nevertheless, contributed to our collective efforts to advance sustainable building for everyone, everywhere.

These achievements include:

### Women in Green Building Leadership

Madlen Jannaschk (Australia) – recognised for her dedication to the mentorship of young professionals, facilitating their learning and growth in sustainability.

Amie Lai (Hong Kong) – recognised for her contribution to pioneering corporate green policies and practices that influenced the wider industry.

Neha Gupta (India) – recognised for her leadership leveraging her strong scientific expertise to create changes within the public policy space.

Anggia Murni (Indonesia) – recognised for her commitment and consistent contribution to sustainability non-profit organisations.

Rowena Ramos (Philippines) – recognised for her firm commitment to putting sustainability at the core of the built environment in the Philippines.

### Leadership in Sustainable Design and Performance Award – Residential

CoEvolve Northern Star (India) is recognised for their impressive achievements of net zero water, and for setting up their project to achieve net zero emissions in the future through circular economy practices.

### Leadership in Sustainable Design and Performance Award – Institutional

Kampung Admiralty (Singapore) is recognised for their nature-based, regenerative features that combine passive design and vegetation to reduce cooling needs and provide well ventilated spaces.

### Leadership in Sustainable Design and Performance Award – Commercial

Shanghai Tower (China) was recognised as an engineering marvel, not only breaking the record for the tallest building in the world but also prioritising sustainability by designing for smaller beams that saved the project tonnes of steel, and making room for onsite renewables through integrated wind turbines and solar panels.

## JURY QUOTES

### Kevin Hydes

Chair and Founder, Integral Group

“Having had the pleasure and honor to judge projects in the Asia Pacific region over the years, this year’s WorldGBC program was striking in the breadth and depth of entries from across the region. To see so many exemplar projects of scale that can shift the needle rapidly in the critical area of carbon reduction and true performance was heartening.”

### Autif Sayyed

Regional Green Building Specialist (Asia), International Finance Corporation

“To break away from the regular practice is never easy, but the rewards are plenty as exemplified by the winners of WorldGBC APN awards over the years. The caring hands and minds behind these projects stretch the limits of design and performance of their buildings to achieve greater comfort for their occupants, lower expenses for their owners and lighter footprint on the environment. A win-win situation for all.”

### Dean Cambridge

Deputy Director, Corporate Engagement, We Mean Business

“The awards are a fantastic opportunity to showcase the leadership being demonstrated across the Asia Pacific region. In this decisive decade for action on climate change, this leadership and innovation from businesses will be critical if we are to reach our collective goal of net-zero by mid-century.”

### Milag San Jose- Ballesteros

Regional Director for East, Southeast Asia and Oceania

“To learn more about the concrete contribution and pioneering work of women in the built environment across the region through the Asia Pacific Women Leadership award was both enriching and inspiring. The submissions were a real testament not just of women’s role in progressing sustainability goals within the industry but their strong leadership and commitment to build better communities.”



# WorldGBC Asia Pacific Leadership in Green Building Award 2020 Jury



**Dean Cambridge**  
Deputy Director,  
Corporate Engagement



**Curt Garrigan**  
Chief of the Sustainable Urban  
Development Section  
UN ESCAP



**Peter Graham**  
Executive Director  
Global Buildings Performance Network



**Kevin Hydes**  
Chair and Founder  
Integral Group



**Jennifer Layke**  
Global Director, Energy Program  
World Resources Institute



**Bernard Li**  
Program Director  
Asia-Pacific Economic Cooperation (APEC)  
Secretariat



**Naoko Nemoto**  
Financial Economist  
Asian Development Bank Institute



**Pamela Phua**  
General Director of Vietnam, Decorative  
Paints South Asia  
AkzoNobel



**Milag San Jose- Ballesteros**  
Regional Director  
Southeast Asia and Oceania at C40



**Autif Sayyed**  
Regional Green Building Specialist (Asia)  
International Finance Corporation



**Christopher John Webster**  
Professor and Dean  
The University of Hong Kong