The Asia Pacific Leadership in Green Building Awards celebrate the iconic green buildings, up-and-coming innovators and inspiring companies driving change and creating a better future throughout the region.

Presented by the World Green Building Council and its Asia Pacific Regional Network of Green Building Councils, this biennial programme recognises four award winners across two categories.

The Business Leadership in Sustainability Award rewards companies that challenge boundaries, integrate sustainability into their business models and make an outstanding contribution to a sustainable built environment.

The Leadership in Sustainable Design and Performance Award is presented to pioneering green building projects that set new benchmarks for sustainability. There are three sub-category winners for residential, commercial and public buildings.

According to WorldGBC's Chief Executive Officer, Terri Wills, nominations from 11 countries were submitted in 2016, reflecting the growing influence of sustainable design, construction and operations on business leadership.

"From Singapore to Vietnam, Australia to Korea, green building is accelerating across the Asia Pacific region in response to significant population growth, environmental pressures and a strong business case," Terri says.

"We applaud each finalist for showing how sustainability can help nations cut carbon emissions and costs, while creating healthy, liveable places for people."

The four award winners gained standing ovations to a crowd of thousands at India GBC's annual Congress in Mumbai, in October 2016.

As the Asia Pacific Leadership in Green Building Awards grows in size and scope, the WorldGBC would like to thank official Award Partners, Jury members and members of the Awards Working Group.
AWARDS FINALISTS

ASIA PACIFIC LEADERSHIP IN GREEN BUILDING AWARDS FINALISTS

Finalists

Business Leadership in Sustainability
- Cundall, Australia
- Henderson Land Development Co. Ltd, Hong Kong
- Delhi Metro Rail Corporation, India

Winner
Delhi Metro Rail Corporation, India

Finalists

Leadership in Sustainable Design and Performance
- Double Cove, Hong Kong
- Asset Aura, India
- Tree House, Singapore

Winner
Double Cove, Hong Kong

Finalists

Leadership in Sustainable Design and Performance
- 69 Robertson Street – Floth, Australia
- Ceres Organics, New Zealand
- CapitaGreen, Singapore

Winner
69 Robertson Street – Floth, Australia

Finalists

Leadership in Sustainable Design and Performance
- University of Queensland Global Change Institute, Australia
- Construction Industry Council – ZCB, Hong Kong
- Energy Dream Centre, Korea

Winner
Construction Industry Council – ZCB, Hong Kong
An extraordinary 947 million passengers travel on the Delhi Metro each year – and the Delhi Metro Rail Corporation (DMRC) is determined to ensure these passengers enjoy access to the world’s most sustainable mass rapid transport system.

Since its inception in 1995, DMRC has been committed to providing comfortable and convenient public transport, while eliminating pollution and road congestion.

At completion in 2021, the metro’s 421km network will criss-cross the boundaries of India’s capital, stretching as far as neighbouring states Uttar Pradesh and Haryana. The first two phases of the network – 213km of track – are already operational. The third and final phase, consisting of 108 stations, is under construction.

Sustainability lies at the heart of DMRC’s core values and culture. From its earliest days, DMRC emphasised efficient use of energy and resources across construction, operations and maintenance.

A founding member of the Indian Green Building Council, DMRC worked collaboratively to develop a green certification standard for metros – a world first. The pilot version of the MRTS Rating System was launched in 2014, with Version 1 following in May 2016.

Each station in the third phase of development was designed to achieve green building certification, and 15 new stations and two sub-stations already have the prestigious ‘Platinum’ mark of quality. DMRC’s residential complex – Metro Enclave at Saket – has achieved a Platinum rating, while its headquarters has Gold certification.

DMRC continues to look to the future as it evolves and refines its processes to reduce pollution and enhance environmental efficiency, while providing great customer service. Some future projects include eliminating plastic from stations and increasing the use of renewable energy.

But for now, Delhi Metro continues to make a landmark contribution to sustainability. In 2015 alone, the metro cut the number of cars on Delhi’s roads by almost 420,000 – and slashed greenhouse gas emissions by almost 620,000 tonnes.
Leadership in Sustainable Design and Performance – Residential

When Henderson Land Development Co. Ltd. started planning Double Cove, its vision was to set a new benchmark for large-scale residential developments. And it has certainly delivered.

With panoramic views of two bays and bordered by extensive woodland and coastline, Double Cove’s masterplan features 265,000 square metres of sustainable housing in 21 residential towers ranging in size from 10 to 35 storeys.

LEED for Neighbourhood Development guided planning and design, with ample green space covering 50 per cent of the site. Green roofs, walls and water features are scattered throughout the development to combat the heat island effect.

Double Cove incorporates 3,500 residential units, as well as a shopping mall, clubhouse, kindergarten, car parks, landscaped gardens and a central park which acts as the precinct’s ‘green lung’.

The design team was determined to create a walkable community, with the residential towers arranged in pairs around a raised park, providing access to green spaces and community gathering places. An all-weather covered walkway encourages healthy and active living, while cycling tracks and jogging paths are well worn. More than 80 electric vehicle charge stations, direct access to the MTR and communal bike rental encourage low-carbon transport options.

The community facilities are as impressive as they are sustainable — a sports hall, indoor and outdoor pools, 3D theatre and karaoke lounge, spa and gymnasium, to name just a few, have been designed with environmental efficiency in mind.

Sustainable design was supported by advanced computer simulations, including heat island analysis and building information modelling, which has enhanced efficiency and indoor environment quality, and reduced energy consumption by 15 per cent when compared to business as usual.

Recycled rainwater harvesting captures 1,700 cubic metres of water each year, saving around 70 per cent of the precinct’s drinking water.

All residents receive a home automation system, helping them to manage energy consumption from a smartphone or iPad, and make behavioural changes to reduce their carbon footprints.

Even waste recycling is considered, with food composting machines just one of the clever strategies helping residents to reduce, reuse and recycle.

Double Cove has won a number of international awards for best high-rise development. Phase 1 has achieved Platinum BEAM accreditation, with provisional accreditation for other phases and Gold pre-certification under the LEED-ND rating tool. Double Cove shows how high-rise can be highly sustainable.

15% reduction in energy consumption from the development’s green features, when compared with business as usual.

80 number of electric vehicle charge stations, which together with direct access to the MTR and communal bike rental, encourage low-carbon transport options.

3,500 residential units, as well as a central park which acts as the precinct’s ‘green lung’.
Leadership in Sustainable Design and Performance – Commercial

With a solid reputation as a sustainable building specialist in Australia, Floth was determined to achieve Green Star certification for its new headquarters in Brisbane’s Fortitude Valley.

However, the people at Floth challenged themselves to push the boundaries of best practice, and achieved Australia’s first 6 Star Green Star – Design & As Built v1.1 rating, representing ‘world leadership’ in sustainable design and construction.

What’s more, Floth’s three-storey office building is also the first to meet the Australian Sustainable Built Environment Council’s standard definition of a zero carbon building. Energy modelling has predicted a 53 per cent reduction in operational carbon emissions from improvements to the building’s façade and building services alone. A roof-mounted solar photovoltaic system offsets 28 per cent of the building’s final operational energy.

The building will also be zero carbon in operation through the purchase of 100 per cent GreenPower supply, with the free electricity generated by the solar panel system more than offsetting the additional cost.

But Floth hasn’t stopped at energy efficiency. Rainwater is collected on the building’s roof and stored in a 15,000 litre tank. Together with other water-saving measures, such as efficient fixtures and fittings, the building is predicted to use 76 per cent less water than a standard practice building.

Floth is committed to transparency, with data collected on the building’s performance shared publicly.

The site’s old building – a timber home known as a ‘Queenslander’ – was transported to a nearby country town to become the new home of a family who lost their house to fire. This alone is estimated to have diverted 20 tonnes of demolition waste from landfill. In total, 88.2 per cent of all demolition and construction waste was recycled saving more than 227 tonnes from ending up in landfill.

The building’s indoor environment quality also received attention, with carbon sensors, low emissions finishes and plants dotted throughout the fitout to keep the air clean. The high-performance air conditioning system responds to the building’s façade, maximising thermal comfort and reducing energy costs.

Comprehensive acoustic and visual comfort measures also make it a great place to work, with pre- and post-occupancy satisfaction surveys revealing a significant improvement in staff productivity and wellbeing.
Asia Pacific Leadership in Green Building Awards

Leadership in Sustainable Design and Performance – Institutional

With Hong Kong’s buildings responsible for 89 per cent of total electricity consumption, the Construction Industry Council (CIC) is determined to take action.

In collaboration with the government, CIC has developed ZCB – the first zero carbon building in Hong Kong to showcase state-of-the-art eco-building design and technology.

ZCB was specifically designed for the high-density, hot and humid sub-tropical urban context of Hong Kong. The adaptable design means ZCB can switch from a tightly-sealed air-conditioned environment to a highly-porous cross-ventilated space. Various design and building systems work in synergy to deliver high environmental quality and performance.

The building’s large open-plan and cross-ventilated layout, together with a high-performance building envelope featuring low-e insulated glass units and deep overhangs, minimise the cooling load during peak summer periods. At non-peak times, natural ventilation and high-volume, low-speed fans counter humid weather.

The design mitigates the local heat island effect and harnesses solar and urban wind energy. More than 1,000 building-integrated solar photovoltaics have been used in the building fabric, helping ZCB produce enough renewable energy for its ongoing operation, while also exporting surplus energy back to the grid. Over a 50-year life span, the building is expected to reduce carbon emissions by 7,100 tonnes.

More than 2,800 sensing points, including four microclimate stations, monitor six dimensions of building performance: energy use; site aspect; indoor environment quality; material aspects; water use and occupancy data. This information is shared with building occupants and visitors through interactive, real-time displays.

Open to the public, ZCB is expected to attract 40,000 visitors each year for tours, seminars, conferences and even eco-weddings. ZCB houses a green office for CIC, a demonstration home for low-carbon living, a multi-function room, as well as Hong Kong’s first urban native woodland.

The urban native woodland and high greenery coverage – amounting to half the site – enhances biodiversity and amenity, while cooling the building in summer by providing shade.

ZCB is the also the first building in Hong Kong that requires compliance with a ‘cool biz dress code’ to foster a cultural shift towards sustainable living.

The project sets a world-class example of low-carbon, highly energy-efficient building in action, providing a learning and teaching tool and acting as a living laboratory for sustainability.
Stefanos Fotiou  
Director, Environment and Development, United Nations Economic and Social Commission for Asia and the Pacific

An accomplished and world-renowned expert on sustainable development, Stefanos is currently planning and managing the work of the United Nations Economic and Social Commission for Asia and the Pacific. Prior to this, Stefanos spent a decade with the United Nations Environment Programme in various roles including as Head of the Cities and Lifestyles Unit.

Inhee Chung  
Senior Sustainability & Safeguards Specialist, Global Green Growth Institute

Responsible for developing and driving Global Green Growth Institute's sustainability and safeguards programme since 2013, Inhee has also worked with the United Nations Environment Program. She also led Korea's sustainability and climate change practice at global sustainability consulting firm, Environmental Resources Management.

C N Raghavendran  
Managing Director M/S. C.R. Narayana Rao

A practicing architect, C N Raghavendran is also Managing Director of his family firm of architects and engineers based in Chennai. He has been responsible for the design, engineering and implementation of a wide variety of sustainable building projects in India, the United Arab Emirates, Mauritius, Maldives, Sri Lanka, Bangladesh, Guyana, Malaysia and Zambia.

Autif Sayyed  
Green Building Specialist  
International Finance Corporation

Leading teams in countries across the Asian region, Autif supports global efforts and provides technical assistance on green building regulations, voluntary certifications and financial investments. Autif is responsible for the roll out of IFC's Excellence in Design for Greater Efficiencies certification system in East Asia, and supports more than US$500 million in IFC's green building investments.

Phil Smith  
Director, New Zealand Collingridge and Smith Architects (UK) Ltd

As Director of Collingridge and Smith Architects, Phil leads the practice's research into sustainable development. Phil's passion for research helped drive sustainable initiatives at the London Olympics, and his innovative approach to sustainable design earned him the WorldGBC's Leadership in Sustainable Design Award for the Te Mirumiru early childhood centre in 2014.