

WORLD  
GREEN  
BUILDING  
COUNCIL

“Together, we can reduce the ecological footprint of our buildings and cities, while delivering valuable economic and social benefits. Our industry is at the forefront of a revolution that is transforming the way people live, work and play – and we are proud to present these examples of green building leadership in the Asia Pacific region.”

JANE HENLEY, CHIEF EXECUTIVE OFFICER,  
WORLD GREEN BUILDING COUNCIL



“As the engine room of the world’s growth, the Asia Pacific region has an unmatched opportunity to lead the way in sustainable building practices. Many organizations and individuals are committed to sustainability and this awards program acknowledges their local entrepreneurship and leadership.”

TAI LEE SIANG, DIRECTOR,  
WORLD GREEN BUILDING COUNCIL



01

## Introduction

The World Green Building Council’s Asia Pacific Network is proud to host the inaugural Leadership Awards in Green Building.

The awards honor outstanding organizations for their commitment to sustainability, and celebrate innovative green building projects that are reducing carbon emissions and other environmental impacts, cutting costs and driving higher levels of health and productivity for building occupants.

The awards celebrate those companies that are ‘walking the talk’. The leaders in our industry understand they are on a journey towards sustainability. Designing and delivering a green building is just the first step on the road, and embedding sustainable business practices takes time. Recognizing and rewarding the companies committed to this journey is what sets these awards apart.

All the nominees demonstrate why sustainability makes sense – for business, for people and for the environment.

Market transformation doesn’t happen overnight. It takes real commitment and real leadership. We are excited to present this platform for the region to share best practice and case studies of excellence, which we are confident will deliver the radical changes needed within our industry to ensure a sustainable future for us all.

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Business  
Leadership in  
Sustainability

The seven organizations selected in the Business Leadership in Sustainability category were chosen from a field of 55 companies.

This category showcases organizations that are committed to integrating sustainability into the way they do business. These companies understand that sustainability is a long-term business opportunity, and are demonstrating that sustainable business practices – both in their internal operations and the product or service delivered to the market – can provide a competitive advantage and enhanced reputation.



1. My Tree House – World's 1st Green Library for Kids
2. CDL Green Gallery – Singapore's 1st Zero Energy Green Gallery
3. Tree House – World's Largest Vertical Garden (Guinness World Records)

Winner

City Developments  
Limited, Singapore

City Developments Limited (CDL) has been a property pioneer since it was established in 1963. Today, it is one of Singapore's largest companies involved in real estate development and investment, hotel ownership and management, facilities management and the provision of hospitality solutions.

A strong advocate and early adopter of sustainability practices, CDL was the first Singapore corporation to be listed on three leading global sustainability benchmarks – the FTSE4Good Index Series, Global 100 Most Sustainable Corporations and the Dow Jones Sustainability Index. CDL was also named a 'Regional Sector Leader' for Asia in the most recent Global Real Estate Sustainability Benchmark.

CDL was the first ever Green Mark Champion in 2008, and

since then has won many awards. CDL has amassed more than 70 BCA Green Mark developments, including 32 Platinum projects – the highest number among private developers in Singapore.

Two of CDL's green properties – 11 Tampines Concourse and City Square Mall – were the first buildings in Singapore to receive the Leadership in Energy and Environmental Design for Existing Buildings: Operations and Maintenance (LEED-EBOM) certification in Platinum and Gold respectively.

The award judges were impressed with CDL's achievements, saying that "the company has the reach, the capacity and the senior management commitment to make a significant positive contribution to the built environment."

Winner

ITC Limited - Hotels Division, India

India's largest luxury hotel chain, ITC Limited - Hotels Division has made social, economic and environmental sustainability a central part of its business model.

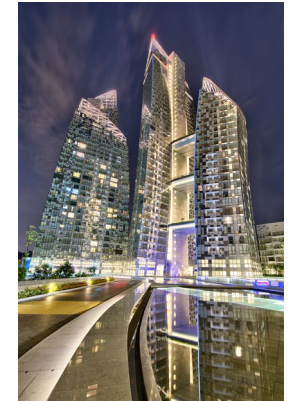
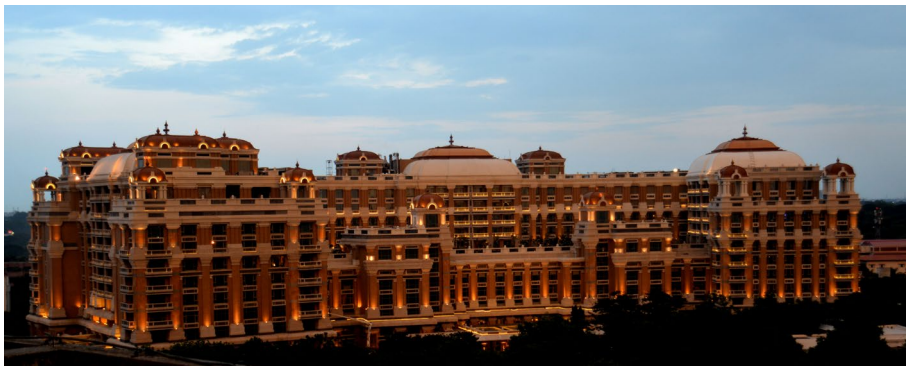
In an industry where sustainability is often an afterthought, ITC shows true leadership in green construction and hotel management. ITC has been a pioneer in advocating green building policies and standards in India.

ITC was the first company in India - and among the first 10 in the world - to publish a sustainability report in compliance with the Global Reporting Initiative. All new hotels achieve ratings under the Leadership in Energy and Environmental Design (LEED) rating system, and ITC's Grand Chola in Chennai

is the world's largest LEED Platinum rated hotel.

ITC has been the recipient of many sustainability awards, including the prestigious World Business and Development Award at the Rio+20 United Nations Summit in 2012. The company was ranked the world's sixth-largest sustainable value creator among consumer goods companies by Boston Consulting in 2010.

According to the judges, ITC is a "leading example in India of what highest level, senior management commitment can achieve. ITC is an exemplar of how strong engagement across an organization leads to better policies and more sustainable outcomes."



Winner

Keppel Land Limited  
Singapore

Keppel Land Limited is one of Asia's premier property companies and is geographically diversified in Asia, with Singapore and China as its core markets, and a growing presence in Vietnam and Indonesia.

Keppel Land targets a minimum of BCA Green Mark Gold Plus for all of its Singapore developments, and equivalent for all new projects overseas. To date, it has received 43 Green Mark certifications, and was awarded the Green Mark Champion in 2014. Keppel Land was the developer of the Ocean Financial Centre, and was recently ranked 17th in the prestigious Corporate Knights' Global 100 Most Sustainable Corporations in the World.

Integrating sustainability into its strategy and operations, Keppel Land adopts a

proactive approach towards environmental management and protection, social responsibility and corporate governance practices, while continually developing innovative solutions to meet stakeholders' needs.

Keppel Land's sustainability management framework was designed to deliver value through sustaining growth, empowering lives of people and nurturing communities where the company operates.

The award judges applauded Keppel Land's comprehensive reporting practice, which includes sustainability KPIs for staff. "Senior management's commitment and willingness to engage in greening the sector is obvious, and deserving of recognition," the judges said.



## Finalists

Engineering firm ARUP has a reputation for pioneering green buildings, eco-communities and sustainable infrastructure in East Asia. Major sustainable projects include Shanghai Expo UBPA redevelopment (the first LEED Neighborhood Development Platinum project outside North America), CIC ZCB (the first zero carbon building in Hong Kong) and Hysan Place (Hong Kong's first commercial building to

attain LEED CS Platinum certification).

ARUP has integrated sustainability across the breadth of its business model, and is committed to leveraging its expertise to deliver innovative, sustainable solutions that promote the values of environmental quality, social wellbeing and economic prosperity, as well as create a lasting and positive legacy for future generations.

### ARUP, Hong Kong

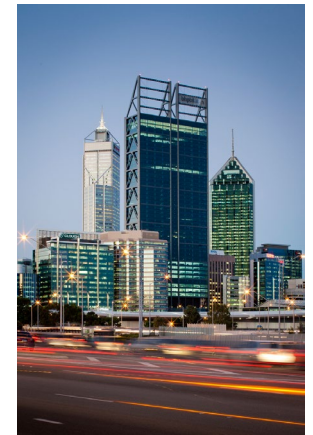


(Above) Shanghai World Expo UBPA redevelopment, China © Kingkay Architectural Photography

### Norman Disney & Young, Australia

NDY has consistently been at the forefront of green building solutions and was a founding member of the Green Building Council of Australia. NDY has been a champion of more efficient, healthy, productive and resilient buildings for many years, has worked on 68 projects certified under the Green Star rating system, and has supported the development of the Green Star - Performance rating tool for existing buildings.

NDY has embedded sustainability into its business operations, services to clients, and the delivery of projects. NDY works with clients to find design solutions that focus on resource efficiency and environmental management, while minimizing its own ecological footprint.



(Above) BHP Billiton - Brookfield Place, Perth

### Lend Lease, Singapore



Lend Lease was the first global property company to be a signatory to the UN Principles of Responsible Investment. Lend Lease's many iconic green buildings include 313@Somerset, which achieved BCA Green Mark Platinum certification and was the first property in Singapore to roll out a green lease.

Lend Lease's sustainability aspirations range from constructing carbon zero and independent green rating of buildings to creating long-term job opportunities for local communities. As a member of the Singapore Government International Panel of Experts, Lend Lease also contributed to Singapore's 2nd Green Building Masterplan.



### Swire Properties Limited, Hong Kong

As one of Hong Kong's largest developers, Swire Properties Limited is known for creating long-term value with its wide range of properties around the world. The company played a leading role in establishing the Building Environment

Assessment Method in Hong Kong in 1996, and has adopted the scheme in designing and managing its properties.

Today, Swire Properties has 25 BEAM and 7 LEED certified projects under its belt. In 2013, it reduced its

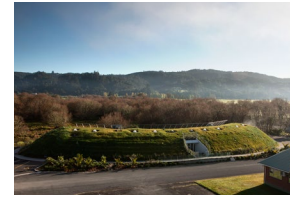
energy consumption by 12 percent despite an 18 percent increase in its gross floor area. Swire Properties was also one of the city's first developers to publicly pledge an energy reduction target and provide free energy audits to its tenants.

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Leadership in  
Sustainable Design  
and Performance

Eight outstanding finalists in the Leadership in Sustainable Design and Performance category were chosen from a field of 57 projects around the Asia Pacific region.

These projects demonstrate how a holistic approach to sustainability can deliver benefits that reach far beyond energy efficiency. All our nominees provide real-world examples of how green buildings are better buildings for the environment, and for people too, and underscore how green buildings in operation are meeting and exceeding their design aspirations.



Winner

Te Mirumiru  
New Zealand

Te Mirumiru, a bilingual childcare center owned by the Ngati Hine Health Trust, was designed to represent the culture and values of the local Ngati Hine iwi, in which guardianship of the earth is deeply engrained.

It is New Zealand's first commercial earth bank building, and was designed by Phil Smith of CASA Architects.

Te Mirumiru is an outstanding example of a building that not only accommodates the next generation, but also engages and educates children about their culture, customs and the environment.

The judges selected Te Mirumiru from a competitive field for its "intelligent design that applies green principles from the outset."

The passive environmental design features include north-facing glazing to maximise solar gain in winter, and a super-insulated earth roof which results in minimal heat loss.

The exposed concrete construction and natural ventilation enable passive cooling in summer, with minimal heating back-up in winter provided by a solar hot water underfloor system.

All spaces are naturally daylight and need no additional electrical lighting during the day. All rainwater is captured on site and used to irrigate the green roof. The result is a building that is 70 percent more energy efficient than a similar code-compliant building.

The building achieved a 6 Green Star rating from the New Zealand Green Building Council - one of only three

buildings in NZ to attain this, and the only Green Star-rated early childhood center in the whole of Australasia.

Gwen Tepania-Palmer, Executive Chair of the Ngati Hine Health Trust, said Te Mirumiru symbolises the hopes and aspirations that whanau (a Maori-language word for 'extended family') have for their children and future generations.

"The gifts of knowledge and Maori culture for our precious children within an environment that recognizes and reinforces the elements of nature and nurture in the physical, psychological and spiritual design of the building is important. Te Mirumiru holds a place of pride for our children, whanau and the wider community," Ms Tepania-Palmer said.

## Finalists

### Khoo Teck Puat Hospital, Singapore



The sustainable design features of Khoo Teck Puat Hospital were rewarded with a Green Mark Platinum rating in 2009. The hospital provides a healing environment through extensive landscaping, while the various blocks are carefully organized to minimize solar heat gain and oriented to maximize cross-ventilation from the prevailing winds.

The hospital consumes 30 percent less energy than any other hospital in Singapore, but it is more than energy efficient. The hospital has been designed as a place of respite for the sick, and a place for healthy people to learn how to maintain vigorous, sustainable lifestyles.

### Ocean Financial Centre, Singapore

Ocean Financial Centre, completed in 2011, is a BCA Green Mark Platinum building and also the first high-rise office development in Southeast Asia to be awarded a LEED Platinum rating. The extensive green roof and green wall - which maximized the site while also reducing building heat gain - was recognised in the Guinness Book of World

Records 2013 as the world's largest vertical garden.

To further promote eco-features to tenants, a customized green fitout guide was produced. Tenant engagement activities are also implemented to promote environmental awareness and practices.



### Shenzhen IBR Headquarters, China

While the construction costs of the IBR headquarters was just two-thirds of the average in Shenzhen, the building's design has successfully reduced energy consumption by 40 percent and air-conditioning energy consumption by 60 percent compared to business-as-usual. The building achieved a 3 Star rating, the highest level of green building certification in China.

Shenzhen IBR headquarters is a sustainability showcase, with more than 40 affordable green building technologies integrated into the building's design. As a national green icon, the building has attracted more than 34,000 visitors from government agencies and industry association, students and citizens, to see the energy efficiency and green features first hand.



### Techno-Station, Obayashi Corporation Technical Research Institute, Japan

Techno-Station was recently awarded Japan's highest LEED Platinum certification. The research and development center fosters sustainable building strategies, and is predicted to outperform 93 percent of buildings worldwide. The building boasts dozens of sustainable features,

including RFID-activated heating and cooling, and lighting systems that can be programmed by employees.

The cutting-edge passive design and high-performance systems have cut carbon emissions by 55 percent on business-as-usual, but the real story is the improvement to productivity

and communication between the researchers.



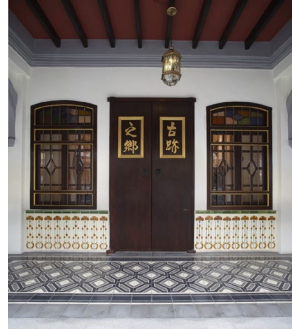


## Hotel Penaga, Malaysia

Located in the UNESCO heritage zone, Hotel Penaga in Penang has transformed a cluster of 15 run-down terraces and shops into a heritage haven that maintains the character of the area while meeting modern travelers' expectations.

Hotel Penaga, which consumes 47 percent less energy than a business-

as-usual hotel of similar size, has been awarded a Gold rating by the Green Building Index, a first for a heritage building. The hotel is an exemplar of energy-efficiency, and the project team's effort to protect and enhance the area, while also delivering the highest levels of sustainability, is worthy of applause.



## Dakeng Elementary School, Taiwan

This school project, led by the Taichung City Government, is an exemplar of low-budget, sustainable design. The project cost less than US\$2.65 million in total, US\$560 per square metre, demonstrating that green buildings are cost-competitive. The Dakeng Elementary School has

become a model of energy conservation and carbon emissions, with many visiting groups coming to see sustainability in action.

The high levels of student satisfaction in the indoor environment is reflected in the growth in enrollments - with 33 percent more students enrolling in the

new green school than in the old school on the same site. Dakeng Elementary School demonstrates that the schools of the future are not only sustainable, but also healthy and productive places for learning.

## Honda Wako Building, Japan

The Honda Wako Building, in the Saitama Prefecture, was completed in 2005 and achieved independent green certification under the CASBEE for New Construction rating system. The sustainable design has halved carbon emissions on business-as-usual, while up to 27 percent less energy is consumed than in a benchmark non-green building. Water saving measures have reduced consumption by 68 percent, and 100 percent

of the excavated soil and demolition scrap of existing facilities was used on-site.

While the green features are impressive, the building's exciting design, with a green hill as its centerpiece, has not only reduced the impact on the surrounding environment, but created a healthy, productive place for people. The Honda Wako Building reinforces that green buildings are good for the environment and good for people too.







Stefanos Fotiou

An expert on sustainable development, Stefanos Fotiou is currently serving as the United Nations Environment Programme's (UNEP's) Senior Regional Coordinator on Resource Efficiency for the Asia Pacific region. Under his portfolio Mr Fotiou is coordinating the regional implementation of UNEP's initiatives on resource efficiency.

"The building sector is one of the most resource-intensive sectors. In Asia, the sector is rapidly growing and UNEP is working with a number of stakeholders to reduce its environment impacts and increase its contribution to sustainability. Recognizing and awarding best practice examples can create momentum towards sustainable buildings," says Mr Fotiou.



Karan Grover

Karan Grover, principal of Karan Grover and Associates, is a passionate advocate of sustainable contemporary architecture that harmonizes with its surrounding culture and heritage. Mr Grover's 22-year effort resulted in the Champanar Pavagadh in Gujarat achieving UNESCO's World Heritage Site status.

"The world movement creating sustainable businesses and buildings is gaining momentum. It is timely and essential that we honor those who are providing leadership in the protection and conservation of all that promotes life and it is a pleasure to be associated with the Asia Pacific Regional Network Leadership Awards in Green Building," Mr Grover says.



Hans Shrader

Senior Program Manager for the International Finance Corporation, Hans Shrader leads teams to develop and implement investment climate growth strategies in partnership with Asian governments and private sector institutions. His expertise lies in legal and regulatory reform that streamlines and rationalizes regulation.

"As a strategic priority, the International Finance Corporation supports energy efficiency and greenhouse gas emission reduction globally. IFC is pleased to collaborate with the WorldGBC to recognize businesses leading in practices to minimize their environmental impact," Mr Shrader says.



Constant Van Aerschot

The Executive Director of the Business Council for Sustainable Development Singapore, Constant Van Aerschot is a member of an International Panel of Experts mandated to review Singapore's green building policies and regulations. He also serves as an advisor to the Global Buildings Performance Network, a global think tank on buildings.

"Awards to celebrate more sustainable design and performance and business leadership are important to motivate change - more than ever in emerging markets where, by 2025, the majority of the global US\$15 trillion construction volume will take place. I commend the WorldGBC and its network for this initiative," Mr Van Aerschot says.



Ken Yeang

An architect, planner and ecologist, Ken Yeang is best known for his signature eco-architecture and eco-masterplanning that have a distinctive green aesthetic. He is principal of Hamzah & Yeang in Malaysia, a firm with expertise in deep green innovative ecological architecture and masterplanning.

"I am delighted to be a part of the Asia Pacific Regional Network Leadership Awards in Green Building, which will identify our leading champions of green design," Dr Yeang says.

## Shaw Contract Group

[www.shawcontractgroup.com](http://www.shawcontractgroup.com)

As the premier commercial brand of the world's largest carpet manufacturer, Shaw Contract Group not only defines design through aesthetic elements, but also through superior performance, innovation and sustainability.

Shaw Contract Group revolutionized environmental stewardship by investing millions of dollars in infrastructure to design and manufacture environmentally-responsible products.

This leadership has resulted in:

- The world's first cradle-to-cradle certified flooring products
- PVC-free and Bitumen-free carpet tile, optimized for human health and safety
- The industry's largest carpet reclamation program reclaiming over 270 million kilograms of carpet since 2006

- The first sustainability report in the industry, published annually following Global Reporting Initiative guidelines.

- A strong commitment to reduce waste by 100% and design all products adhering to cradle-to-cradle protocols.

As a part of Shaw Industries, a Berkshire Hathaway company, Shaw Contract Group has access to the best talent, capital and resources in the industry. By leveraging this financial strength and expertise, the brand has received numerous design awards and was recognised among Contract magazine's top ten "Brands that Inspire."

## World Green Building Council

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

The World Green Building Council connects a global coalition of more than 100 national Green Building Councils and their 27,000 member companies with a single mission: to transform the building industry and ensure our buildings and cities are healthy, efficient, productive and sustainable.

The WorldGBC Asia Pacific Regional Network of Green Building Councils is where leaders of the movement meet to learn, share experiences and explore opportunities for regional collaboration. It's the forum for people to drive the uptake of green building design, practices and technologies across the Asia Pacific.

The Asia Pacific Network is focused on areas:

- Government support: engage with all levels of governments to build partnerships and work together on our common objectives
- Rating tools: work with industry to encourage the uptake of green building rating tools
- Industry recognition: start programs that enhance the profile of GBCs and the green building movement throughout the region
- Community based engagement: establish grass-roots networks and programs to improve community understanding of the benefits of green building
- International connections: collaborate with the GBC network across the globe.

## Participating Green Building Councils



[WWW.WORLDBGBC.ORG/ASIAPACIFIC](http://WWW.WORLDBGBC.ORG/ASIAPACIFIC)