

HKGBC Green Guide : Revitalising Industrial Buildings



The Chief Executive announced new measures in his 2009-10 Policy Address to promote the revitalisation of industrial buildings. Whilst meeting economic and social needs by providing readily available land and premises, this also presents the opportunity to enhance the quality of our environment. As such, all three pillars of sustainable development can be addressed – social, economic, environmental – while helping owners to maximise the value of their buildings.

The conversion of vacant or under-utilised industrial buildings is in itself a sustainable way to reduce waste and conserve natural resources. However, building owners can benefit further from a range of other "green design features", especially in the priority areas of energy conservation, greening, waste reduction, and water use.

The BEAM Plus green building label, Hong Kong's comprehensive and voluntary environmental assessment scheme, helps owners to understand and capture these opportunities.

Adopting green features in revitalised industrial buildings provides benefits not just to you as the owner, but to your tenants and the broader community. These benefits include:

- reducing your costs – for ongoing energy and water charges during the life of the building, and waste disposal charges during its demolition and construction phase
- attracting the growing generation of environmentally conscious tenants – by providing a healthier, more efficient and productive workplace, and helping them to promote their own green credentials
- strengthening your reputation as a responsible corporate citizen – by demonstrating your commitment to green building, innovation and conservation
- contributing to better air quality, waste reduction and a smaller carbon footprint for Hong Kong, whilst creating a cooler and greener urban landscape

These reasons and more make the investments in green building worthwhile over time, by ensuring a "future-proof", viable and higher value asset for the longer term.

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BEAM Plus New Buildings

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Developed with widespread industry engagement, BEAM Plus is Hong Kong's home-grown rating system to enhance building environmental sustainability. BEAM Plus defines over 100 criteria that promote sustainable sites and healthy indoor environments whilst reducing energy, water and resources consumption and carbon footprint.

Certification of buildings is voluntary and undertaken on behalf of HKGBC by the non-profit BEAM Society. Credits are awarded where the BEAM Plus best practice criteria are achieved, with a rating of Platinum, Gold, Silver or Bronze issued according to the building's overall level of performance.

Clients use their BEAM Plus building ratings to demonstrate their adoption of best practice local and international standards for green building. HKGBC also oversees the training and accreditation of BEAM Professionals who use their green building and assessment knowledge to support clients in optimising their building's performance.

Industrial buildings are eligible for certification during their design, construction, conversion and renovation using BEAM Plus for New Buildings. For more information and to register your project for certification, please contact the Secretariat at:

T: 3994 8813
E: beamplus_enquiry@hkgbc.org.hk
W: www.hkgbc.org.hk/eng/beamplus-main.aspx

Examples of the BEAM Plus best practices are highlighted here. Download the BEAM Plus New Buildings standard for free for further details.

Energy Use (EU)

- compliance with the Building Energy Codes (BEC) as the minimum target
- use of energy efficient building services systems and equipment better than the requirements of the BEC
- separate energy metering for cooling systems and electricity use (including common/ public areas)
- 0.5% or more of base building energy use from renewable energy sources, where appropriate

Benefits

- reduce your ongoing energy costs for the operational life of your building by 10 to 15% or more
- contribute to a reduced carbon footprint and better air quality in Hong Kong
- attract the growing generation of environmentally conscious tenants and occupiers

Site Aspects (SA)

- appropriate planting and greenery targeted at 20% or more of the site area (e.g. green roof and vertical greening)
- shading to outside areas to enhance the local microclimate, trees planting at pedestrian levels where possible
- convenient pedestrian access to public transport
- adopt an Environmental Management Plan during construction to minimize air, water and noise pollution

Benefits

- provide a healthier and more productive working environment for your customers
- help create a cooler, greener and more interesting urban environment for Hong Kong
- strengthen your reputation as a responsible corporate citizen in your neighbourhood

Materials Aspects (MA)

- target collection of 30% or more of construction and demolition waste for recycling
- avoid timber during temporary works, and ozone damaging refrigerants in cooling systems
- use recycled building materials (e.g. pavers) and materials from local or regional sources
- provide recycling collection facilities for use by the occupants of the revitalised building

Benefits

- bring down your waste disposal charges during the demolition and construction phase
- stimulate demand for green materials and recycling in Hong Kong, and help bring down their future costs
- help your tenants demonstrate their own green credentials through waste reduction and recycling

Water Use (WU)

- install water economy devices to reduce water use by 10% or more
- provide leak detection devices to prevent fresh water wastage
- install water efficient appliances that are at least 20% more efficient than the norm
- where possible, adopt grey water recycling (e.g. rainwater) equivalent to 5% of fresh water use

Benefits

- reduce your operating costs – both water supply and sewage disposal – for the operational life of your building
- help Hong Kong conserve its valuable water resources and reduce future costs to society
- demonstrate your commitment to green building, innovation and conservation