

Carbon-caring Corporations

**What can you do to make your office as environmentally friendly as possible?
Ir Dr Shelley Zhou explains how to create a true eco-office.**

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Premises Going Carbon Caring

If you were a workplace owner and wanted to move to a new office in Central, before moving, what might keep you thinking was how to make your new office a “green” office.

If you were a pioneer in an Architecture firm, you might want to put the “low-carbon” element into your design for the new interiors.

If you were a facility manager at a big organization, you may consider renovating your existing office in compliance with LEED for Commercial Interiors and operating it in a most energy -efficient way.

Even if you were a HR manager, you might need help to conduct office planning from a sustainable point of view and you may like to encourage your staff to implement “green” practices and to use the office resources and equipment more wisely.

Whoever you were, as a responsible individual, you want to contribute in tackling climate change via your expertise in planning, design, construction, operation or management of your premises, and make it a new sustainable one in the near future.

However, how exactly can we achieve that?

Current Certification Schemes

What do sustainable premises mean? Currently on the market are some internationally or locally recognized rating and labeling systems.

US Green Building Council launched its *Leadership in Energy and Environmental Design (LEED)* rating system for Commercial interiors in 2005. LEED for Commercial Interiors (LEED-CI) is the green benchmark for tenant improvements of new or existing office space. It is an integrated design tool that sets the industry standards for green design and construction of tenant improvement projects to enhance the indoor environment. It is the recognized system for certifying high-performance green interiors that are healthy, productive places to work; are less costly to operate and maintain; and have a reduced environmental footprint. *LEED-CI* gives the

power to make sustainable choices to tenants and designers, who do not always have control over the entire building operations. It covers seven areas such as sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation in design and regional priority.

The benefits of *LEED-CI* include:

- Enhance occupant well-being and productivity
- Improve employee retention and reduce absenteeism
- Reduce liability associated with poor indoor air quality
- Increase marketability
- Decrease churn costs
- Lower operating and maintenance costs

Registered project list in HK (source: USGBC website)

<u>Project Name</u>	<u>Location</u>	<u>LEED Rating System</u>
<u>Charles Schwab Hong Branch Relocation</u>	Hong Kong	LEED CI 2.0
<u>Citi One Island East</u>	Quarry Bay	LEED CI 2.0
<u>HOK International (Asia/Pacific) Limited</u>	Hong Kong	LEED CI 2.0
<u>Macquarie Bank HK Relocation Project</u>	Hong Kong	LEED CI 2.0
<u>MMoser Hong Kong</u>	Hong Kong	LEED CI 2.0
<u>T Rowe Price - Hong Kong</u>	Central	LEED CI 2.0

Locally, being recognized by the community as one of the most prestigious and reputable award schemes, the Hong Kong Awards for Environmental Excellence (HKAEE) started with the "*Environmental Labels*" and "*Sectoral Awards*" in 2008. The former offers recognition to those that have achieved committed goals in waste reduction, energy conservation, improving indoor air quality (IAQ) and improving product environmental attributes; while the latter grants awards to organizations with an overall outstanding environmental performance. In this year, HKAEE introduces the new ***Carbon“Less”*** Certificates scheme to acknowledge organizations making carbon reduction efforts.

In July 2008, the Environmental Protection Department and the Electrical and Mechanical Services Department launched the "*Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings of Commercial, Residential or Institutional Purposes in Hong Kong*" to assist companies or organisations which have signed the Carbon Reduction Charter and become "Carbon Audit·Green Partners" in conducting carbon audits on their buildings. The drive to cut Hong Kong's carbon emission has gained momentum when in April 2009, the Environment Bureau launched a HK\$450 million funding scheme with HK\$150 million for energy-cum-carbon audits and the other HK\$300 million for energy efficiency projects for buildings.

The Carbon” less” label is developed to support these government schemes and to encourage the buildings and office-based organizations to achieve a verified absolute reduction of carbon emission. The applicants must achieve at least 3% reduction to obtain the certificate.

These rating or certification schemes show us that a green interior should start from the design stage, while a low-carbon office could be achieved through carbon management. Making your premises **carbon caring** and **climate-friendly**, you should consider green design and construction, best operation and quantify all the criteria into a carbon language by applying international standards, integrating carbon-conscious concepts and measurements plus offsetting.

Green Interior Design

Four areas are used to evaluate a premises’ level of sustainability at design stage. These 4 categories are:

Energy Performance

To increase the levels of energy conservation and reduce carbon emissions; to reduce energy consumption and the economic impacts associated with excessive energy use.

Materials and Waste

To facilitate the reduction of those waste generated by premises occupants and to be disposed of in landfills.

Water Usage

To reduce the water usage and increase the water efficiency within the premises to reduce the burden on municipal waste supply and sewage treatment; to reduce the electricity/energy used on water processing and wastewater treatment.

Innovations

To encourage innovative design to achieve optimum carbon reduction.

Best Operation Practices

Low-carbon best practices in the premises need commitment from the top management and engagement with staff. The most important thing, however, is to change the current corporate culture into a low-carbon one.

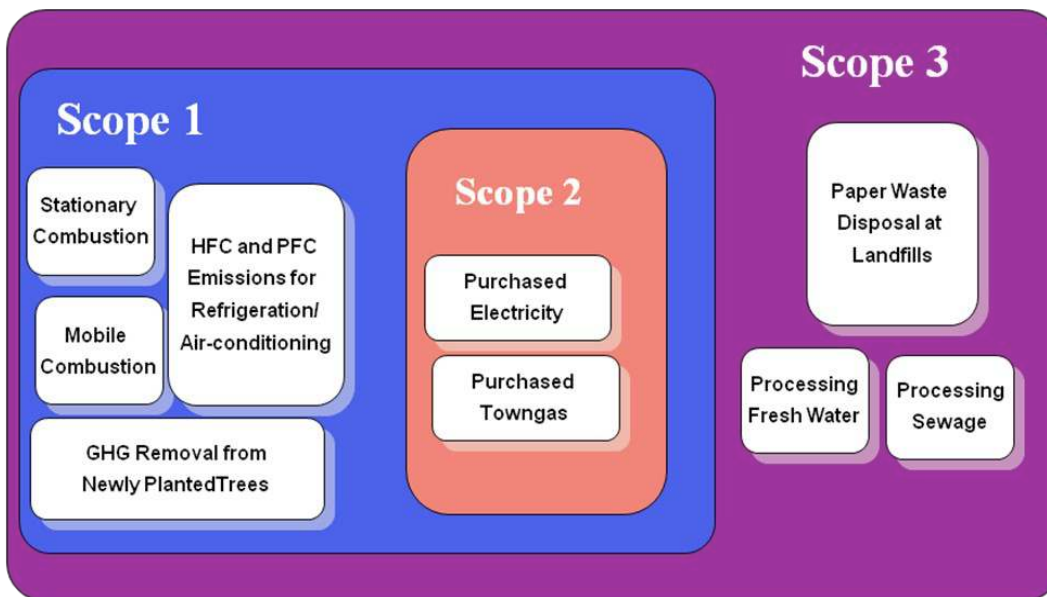
Best premises’ operation takes into account the following 7 areas:

- ✓ *Low Carbon Commitment*
- ✓ *Training and Communications*
- ✓ *Energy Use*
- ✓ *Paper Use*
- ✓ *Waste and Recycling*
- ✓ *Green Purchasing*
- ✓ *Green Transport*

Carbon Management

This is to quantify the premises' design and operational practice in terms of Carbon Footprint. Carbon Management includes: carbon footprint measurement, carbon footprint reporting and carbon reduction through offsetting.

Carbon footprint is a “measure of the impact human activities have on the environment in terms of the amount of green house gases produced, measured in units of carbon dioxide”. International standards include: GHG protocol and ISO 14064. The following figure illustrates the emission sources and scopes from EPD's carbon audit guidelines.



Why Carbon Offsets?

Carbon offsets help you balance out your own contribution to global warming by funding greenhouse gases reduction projects. With carbon offsets, you can balance out 100% of those emissions you cannot eliminate through conservation. Funding such projects also create green jobs, reduce health and life hazards created by industries such as coal-mining, re-create balance in communities badly affected by carbon emitting industries or climate change.

Making your premises carbon caring, or turning it into a climate-friendly one is a long journey. However, any “one small step from a man” could make “a giant leap for mankind”. Why not start now with a green design, followed by the best operation guides, as well as a good carbon management strategy? Each single carbon reduction step shows your genuine effort in tackling climate change. This is what this planet needs and what we should contribute.

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For related information on CarbonCare Premises, please see [CCA's Products and Services](#) or [contact us direct](#).