

環保建築大獎

GREEN BUILDING AWARD 2006

Professional Green Building Council Hong Kong





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GREEN BUILDING AWARD 2006

Green Building Award is a new industry award organized by the Professional Green Building Council (PGBC), which is jointly founded by the Hong Kong Institute of Architects (HKIA), the Hong Kong Institution of Engineers (HKIE), the Hong Kong Institute of Landscape Architects (HKILA), Hong Kong Institute of Planners (HKIP), and the Hong Kong Institute of Surveyors (HKIS). With the launch of the GBA, PGBC aims to provide recognition to buildings and research projects with outstanding features and contributions in sustainability and the environment and also to encourage the industry towards further adoption of sustainable planning, design, construction and maintenance of buildings.

OBJECTIVES

- To provide recognition to building-related / research projects with outstanding contributions in sustainability; and
- To encourage adoption of sustainable planning, design, construction, maintenance and renovation of buildings.

AWARDS CATEGORY

Green Building Award 2006 is presented to categories listed below:

- **New Buildings** (buildings completed on or after 1 January 2001)
- **Existing Buildings** (focus on management and maintenance)
- **Newly Renovated Buildings** (renovation completed on or after 1 January 2001)
- **Research and Planning Studies**

Nominated projects must be within the territorial limits of the Hong Kong Special Administrative Region with no limitation in size and cost, yet should be practically completed within the specified period as stated.

TIMELINE

- January 2006 Announcement of GBA2006 and open for nominations.
- March 2006 Deadline for submission of nomination documents and materials.
- April 2006 First screening on all nominations by the professional institutes' representatives.
- Early May 2006 Confirmation of short-listed projects by the Organizing Committee.
- Late May 2006 Final presentation by the short-listed applicants to the jury panel.
- 30 June 2006 Award announcement and presentation ceremony.

ASSESSMENT CRITERIA

NEW BUILDINGS CATEGORY

Quality

- Living quality and indoor environmental quality
- Enhancement of natural environment and microclimate consideration
- Consideration of the visual, cultural, environmental & social effects on the surroundings and community

Resources

- Resources and energy conservation
- Waste and pollution management and control
- Use of sustainable design, construction materials, and construction / demolition method

Sustainability

- Sustainability policy
- Consideration of the overall performance of every stage of a building life
- Buildability and maintainability

Innovation

- Bonus for innovation

EXISTING BUILDINGS CATEGORY

Quality

- Living quality and indoor environmental quality

Resources

- Efficient use and modifications of existing fabric, facilities and features to enhance energy efficiency and functioning

Sustainability

- Sustainability management and maintenance scheme
- Maintenance programme
- Operation, management and maintenance of the building fabric and building features

Innovation

- Bonus for innovation

NEWLY RENOVATED BUILDINGS CATEGORY

Quality

- Living quality and indoor environmental quality
- Compatibility with the existing building and surrounding environment
- Consideration of the visual, cultural, environmental & social effects on the surroundings and community

Resources

- Resources and energy conservation
- Waste and pollution management and control
- Use of sustainable design, construction materials, and construction / demolition method

Sustainability

- Sustainability policy
- Consideration of the overall performance of every stage of a building life
- Buildability and maintainability

Innovation

- Bonus for innovation

RESEARCH & PLANNING STUDIES CATEGORY

Originality

- Fundamental research/ planning study that enhances the advancement in sustainability

Practicality

- Applicability in the industry in terms of sustainable planning, design, construction and/ or operation of buildings

Quality

- Fundamental research/ planning study that enhances the advancement in sustainability

Innovation

- Bonus for innovation

JURY PANEL

Members of GBA 2006 Judging Panel include: Ir Dr the Hon Raymond HO Chung-tai, S.B.St.J., JP, member of the Legislative Council (Functional Constituency – Engineering), the Hon Patrick S S LAU, SBS, JP, member of the Legislative Council (Functional Constituency – Architectural, Surveying and Planning), the Hon Abraham SHEK Lai-him, JP, member of the Legislative Council (Functional Constituency – Real Estate and Construction), Mr Kenneth CHAN, Chairman of PGBC, Mr Reuben CHU, Chairman of GBA2006 Organizing Committee, Presidents/representatives from professional bodies including Hong Kong Construction Association, Hong Kong Institute of Architects, Hong Kong Institution of Engineers, Hong Kong Institute of Landscape Architects, Hong Kong Institute of Planners, Hong Kong Institute of Surveyors, Real Estate Developers Association of Hong Kong, and Vice President (Research Development) of Hong Kong Polytechnic University.



GBA2006 LOGO

The logo design concept is to reflect the lifecycle perspective of our built environment which is categorized into 4 key stages: from research / planning, new design and construction, operation and maintenance, and renovation / deconstruction. The notion of sustainability has to be embedded in each of these stages with a view to conserving our environment, locally and globally. This echoes the underlying vision of the Green Building Award initiated by the Professional Green Building Council, Hong Kong.

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房屋及規劃地政局局長獻辭

Message from the Secretary for Housing, Planning and Lands

我衷心祝賀環保建築業議會成功籌辦首屆〈環保建築大獎〉。今次大獎的主題與政府提倡可持續樓宇建築的政策甚為配合。而參與競逐的建築及研究計劃的質素之高，以及其所展現的可持續發展及環保設計都非常突出，令我留下深刻的印象。

我們一直與建築業界攜手努力，以改善本港樓宇的設計和建築。今次〈環保建築大獎〉便是一項重要的活動，去宣傳如何在樓宇的各個不同階段應用可持續發展的元素，包括：建築規劃、設計、建築及維修等階段，以及加入環保和具能源效益的設計。憑藉我們的不斷努力，我深信香港定能成為更環保的城市，讓我們引以自豪。

我藉此機會祝願環保建築專業議會在未來推廣環保的工作取得成功。

房屋及規劃地政局局長孫明揚

I offer my warmest congratulations to the Professional Green Building Council on your successful launch of the first Green Building Award. The theme of the Award echoes with the Government's policy initiative to promote sustainable buildings. I am deeply impressed by the high quality of the participating building and research projects, all of which exhibit outstanding sustainability and environmentally-friendly features.

We have always worked hand-in-hand with the building industry to strive to improve the design and construction of buildings in Hong Kong. The Green Building Award serves as an important incentive to promote the adoption of sustainable elements throughout the life cycle of a building, including the planning, design, construction and maintenance stages, as well as green and energy efficient building features. With our continuing efforts, I am sure we can make Hong Kong a greener city which we will all be proud of.

I take this opportunity to wish the Professional Green Building Council every success in your future green endeavours.

Michael M Y SUEN

Secretary for Housing, Planning and Lands



環保建築專業議會主席獻辭

Message from Chairman, PGBC

環保建築大獎2006是香港推動環保建築運動的里程碑。作為環保建築專業議會的主席，本人十分興幸看到這次於香港舉辦的首屆環保建築大獎，能獲得業界的積極參與及熱烈回應。透過舉辦環保建築大獎，我們得以公開表揚業內曾經為環保建築發揮創意及努力的專業人士，同時更能蒐集有關環保建築項目及研究的詳細資料，協助業界建造可持續發展的香港。這對整合政府部門、專業人士、發展商、管理公司及學界為香港可持續發展建築而作出的研究、規劃、設計、建造及管理工作亦作出了重大的貢獻。

我們深信，集合所有參賽項目於發展香港環保建築進程中所作出的各方面貢獻及所得的資訊，將能惠及學界、專業人士、行業研究人員及其他專才，我們可以從別人成就上有不少的學習。我希望這本刊物中刊載的資料將能啟發您對環保建築的構思及方向。

最後，祝願大家能於開拓可持續發展未來的進程中大展拳腳。

陳佐堅測量師

Green Building Award 2006 is indeed a milestone in the green building movement in Hong Kong. It gives me, as Chairman of Professional Green Building Council, great pleasure to see the immense interest in and enthusiastic response to the first ever 'Green Building' award in Hong Kong. This exercise has given us the opportunity to publicly recognize the innovation and hard work of professionals in our industry and also to gather projects and studies in our course towards building a sustainable future for Hong Kong. This is regarded as the major contribution towards gathering and consolidating the various efforts made by the government, professionals, developers, management companies and academia in the research, planning, design, construction, renovation and management of sustainable buildings in Hong Kong.

We are convinced that it will be very useful to conglomerate the information that represents efforts, big and small, in the quest of green buildings for Hong Kong as provided by entrant projects for the reference of students, professionals, researchers, etc. There are a lot that we can learn from each other. We hope the materials contained in this little humble publication will inspire you and your future undertaking in green buildings.

Finally, let me wish you all the best in the road towards a sustainable future.

Kenneth CHAN Jor Kin



環保建築大獎2006籌備委員會主席獻辭

Message from Chairman, Green Building Award 2006 Organizing Committee

由環保建築專業議會主辦的環保建築大獎2006乃一嶄新的業界獎項。環保建築專業議會是由香港建築師學會、香港工程師學會、香港園境師學會、香港規劃師學會以及香港測量師學會所組成。

環保建築大獎旨在表揚在可持續發展方面有傑出貢獻的建築，並鼓勵在環保建築方面的研究、規劃、設計、建造、維修及翻新。

環保建築大獎2006能獲業界的熱烈支持，我們實在非常鼓舞。首屆的環保建築大獎共接獲55項提名，當中包括全新建築、現有建築、翻新建築以及研究與規劃四大類別。經過全面的初步評審後，30個優質項目被挑選進入最後評審階段。

經過嚴謹的評審過程及熱烈的討論，評審委員會選出四大類別的大獎和優異獎得獎項目。頒獎典禮於2006年6月30日舉行。

此外，我們非常榮幸邀請到環保建築專業議會榮譽顧問及房屋及規劃地政局局長孫明揚先生，擔任頒獎典禮的主禮嘉賓，與我們共同參與推廣香港的環保建築。

在此，本人衷心地向各參賽隊伍、顧問、評審委員、贊助商、支持單位、籌備委員會委員及為環保建築大獎作出貢獻的各位致以萬分感謝。

最後，祝願大家能在環保及可持續發展方面繼續努力並取得美好的成果。

朱沛坤工程師

Green Building Award 2006 (GBA 2006) is a new industry award in Hong Kong organized by the Professional Green Building Council (PGBC). PGBC is jointly formed by the five professional Institutes - the Hong Kong Institute of Architects (HKIA), the Hong Kong Institution of Engineers (HKIE), the Hong Kong Institute of Landscape Architects (HKILA), the Hong Kong Institute of Planners (HKIP) and the Hong Kong Institute of Surveyors (HKIS).

The main objectives of GBA 2006 are to promote green research, planning, design, construction, maintenance and renovation of buildings by recognition to those projects with outstanding contributions in sustainability.

We are much grateful to have received overwhelmingly encouraging support and participation in GBA 2006 with a total of 55 nominations received under the four award categories of New Buildings, Existing Buildings, Newly Renovated Buildings, and Research & Planning Studies. 30 projects have been short-listed to enter the finalist stage after an initial thorough assessment.

Following quality discussion and rigorous assessment by the jury panel, the Grand Award and Merit Winners of GBA 2006 for all four categories have been selected, with the GBA 2006 presentation ceremony on 30 June 2006.

Furthermore, it is our great honour to have Mr. Michael Suen Ming-yeung, GBS, JP, to participate in the course of promoting green buildings in Hong Kong as the Honorable Advisor of PGBC and also our Guest of Honour for the award presentation ceremony.

Lastly, I would like to take this opportunity to thank all participating teams, advisors, jury panel members, sponsors, supporting organizations, organizing committee members and those who have contributed to GBA 2006. Thank you very much and wish you every success in building a green & sustainable future.

Ir Reuben CHU



香港建築師學會獻辭

Message from The Hong Kong Institute of Architects (HKIA)

作為環保建築專業議會創會成員之一，香港建築師學會喜見它自2002年創立至今的茁壯。其開創之2006年「環保建築大獎」，獲建築師、工程師、園境師、測量師及規劃師五個專業學會在背後聯合支持，正正反映業界衷力合作推動環保建築之里程，共同正視建築的生命週期，含規劃、設計、建造、翻新、營運、管理以至研究多方面的考慮。

我們要認知的是當今生活模式並不可持續，香港人均「生態足印」達4.6公頃之多，是1997年數句中世界人均之兩倍半！邁向可持續發展，我們極需轉變「硬件」及「軟件」雙方面，包括城市設計與管理，以至我們的生活態度及消費模式。地球只有一個，但我們現在的生活模式需要「兩個地球」以上。

環保創新的新建設須展示設計之高效能水平，指標是二至三倍的節約基數，更理想的應達「四倍」之尺度 (Factor Four)。現成樓宇所佔的量至大，整體質素的提升尤其重要。現成樓宇的改造優化亦須更廣泛倡導，不論從資源保育或是社會文化角度而言。對應香港獨特的高密度城市環境，環保的規劃及建築研究極具意義，藉此可引導創新而合適的本地設計，亦培養本地環保設計的專才。

祝願此首屆「環保建築大獎」，譜出一系列綠色建築之典範，從都市氣候之設計問題以至村郊公廁之翻新改造，讓不同類型及規模的項目作參考比量。「小」亦是美，「少」[環境負荷]即是多[接近可持續發展]。

As one of the founding members, HKIA is delighted to witness the growth of PGBC since its establishment in 2002. The GBA2006 as a new initiative organized by PGBC, jointly supported by HKIA, HKIE, HKILA, HKIS and HKIP, represents another significant step forward with respect to the professional collaboration in accelerating the recognition, understanding and implementation of green buildings based on a lifecycle perspective embracing the aspects of planning, design, construction, renovation, operation and management, and research.

We have to admit that our prevalent lifestyle is not sustainable. The average Ecological Footprint of a Hong Kong citizen is about 4.6 hectares, which is equivalent to 2.5 times of the global fair share (1.85 hectares per capita) according to the 1997 figure. Towards sustainability, on one hand, we need our built environment shaped and managed in a much more environmentally benign way (infrastructure upgrade); on the other hand, we need paradigm shift towards the "One Planet Principle" (attitude change). We are still far away from the goal.

Pioneering new buildings are essential to lead the industry towards benchmarking higher performance since we need them to be 2 to 3 times more resources efficient, if not yet up to the notion of "Factor 4". Existing buildings representing the largest stock deserve much more attention by all – great things are done by a series of small things brought together. Adaptive reuse of existing buildings, from both environmental and social perspectives, needs wider promotion in Hong Kong. For our unique high-density city, sustainable planning and building research will provide us with more solid yet innovative grounds for advancing local practice and knowledge.

We wish that the GBA2006 projects representing a spectrum of "green shades" in Hong Kong would build up exemplary models, from climate-responsive urban design to public toilet renovation, for other projects of different nature and scale to further explore and excel. Small can be beautiful. Last but not least, less [ecological loadings] is more [sustainable].



香港工程師學會獻辭

Message from The Hong Kong Institution of Engineers (HKIE)

環保建築專業議會自2002年成立以來，一直積極地舉辦各項推廣可持續發展都市及建築設計的活動。隨著市民大眾對環境可持續發展的意識及關注日益增加，環保建築大獎的舉辦可說是把握時機，與時並進。是次大獎目的在於表揚對可持續發展建築有卓越表現的建築工程及研究，同時鼓勵業界在未來的建築物設計、建造、維修及保養與及各項研究中，多從可持續發展的方向出發。

香港工程師學會非常榮幸能成為環保建築專業議會的一員，與其他建築業相關的專業團體共同舉辦是次大獎。這次活動除了提供一個良好的平台予參賽者去介紹其作品的環保及可持續概念外，亦給予入圍代表一個與評審團分享及交流的機會。

隨著環保建築大獎2006的成功，我們希望此獎項能成為對香港優越環保建築的一個公認指標。而我會亦當盡全力支持是項極具意義的活動。

Professional Green Building Council (PGBC), since its incorporation in 2002, has been actively organising various events to promote a better and sustainable built environment in Hong Kong. With the ever-increasing public awareness on building a sustainable and green environment, the initiative of the Green Building Award (GBA) 2006 came at an opportune time for PGBC to give recognition to buildings/research projects with outstanding features and contributions to sustainability and the environment, as well as to encourage the adoption by the industry of sustainable planning, design, construction, maintenance and renovation of buildings.

The Hong Kong Institution of Engineers (HKIE) is honoured to be one of the members of PGBC and having the opportunity to collaborate with our construction-related counterparts on the organisation of the Award.

The Award provides a platform for our industry practitioners to showcase their concept and idea on green and sustainability and giving an opportunity for the finalists to meet with the Jurors for sharing and exchanging views.

With the success of GBA 2006, we hope that the Award will become a widely recognised honour to green buildings in Hong Kong and HKIE will undoubtedly provide our full support to this meaningful event.



香港園境師學會獻辭

Message from The Hong Kong Institute of Landscape Architects (HKILA)

香港園境師學會很榮幸見證首屆「環保建築大獎」的誕生。環保建築專業議會是次舉辦的獎項活動，確實帶領香港建築業跨進另一個里程碑。各專業團體是次的努力，定能引領建築業界對綠色環境及可持續發展的訴求更見關注。

作為園境師，我們不單關注個體建築物，更關注我們城市整體綠化而提升生活質量的需求。我們肩負著的使命是提升社區居住環境及保育大自然資源。在香港，這實在是一個挑戰，把可持續的綠色環境帶到每項建設發展裏。植物，自然環境不就是環保建築最好的綠色元素嗎？環保建築的理念定必帶領業界提升香港的建設水平，實踐及建築一個以環境倡議、合乎環保持續原則、更合乎人民居住的理想都會。

我們祝賀環保建築專業議會所舉辦的「環保建築大獎」成功，並期望將來的「環保建築大獎」能引進更多綠化空間，使香港這個都會城市更美好。

It is indeed a commendable step forward for Hong Kong that PGBC is launching this first GBA in 2006. With the joint collaborative efforts of all building professionals, we are certain that GBA will lead industry awareness of green and sustainable developments to a new level.

Landscape architecture, more so than other building industry professionals, has had to tend to nature's requirements in our city. We have the burden of making every development 'green', with vegetation and other nature's elements. Is not more nature and natural element the desirable trait of all green developments?

We congratulate PGBC in the success of GBA 2006, and hope that this and future Green Building Awards will bring forth more projects with focuses on turning our city more naturally green.



香港規劃師學會獻辭

Message from The Hong Kong Institute of Planners (HKIP)

香港規劃師學會今年正式加盟環保建築專業議會，為推動香港成為更環保及可持續發展的城市而出一分力。我們深信透過個別發展，自發性地啟動環保計劃和措施，是推廣及實踐環保意識對城市發展的重要性的最有效方式。只有紮實的公民環保意識，才可令環保城市規劃及發展達至事半功倍的效益。

在最近的環保建築大獎2006評審過程中，見到眾多參與的私人及政府項目，均積極及有創意地自我提升環保設計及相關措施，實在另我們感覺鼓舞，當中包括在節省能源/資源上的設計和措施，盡量利用地盤的天然資源（如採光、通風、等等），創造更環保、更優質的生活和工作環境。這些自發性的努力是應嘉許和鼓勵的。同時，亦為業界注入更大的動力，為未來的城市發展和建設奠定基礎。

要建設一個更環保及可持續發展的城市，我們必須優先處理一些重要的議題，包括優化城市設計、加強公民對環保的意識和責任、提升推動綠環境和綠城市的力度、推動以人為本的原則，設計公共設施等。在過去數十年，香港面對龐大和高速的城市建設及經濟發展壓力。現在正是一個好時機，讓大家仔細想想如何提升我們現在的生活及工作空間質素。

HKIP joined the PGBC this year, and it is our honour to become a part of this active force amongst the professionals in the development industry to strive for greener and more sustainable ways of building our City. We believe that the most effective means to promote and actualise green concepts in city development is through the cumulative effects of green initiatives undertaken through individual projects. Strong public awareness and support are essential for sustaining the momentum for the on-going green movement in the development and planning arena.

In the process of adjudication for the Green Building Award 2006, it is very encouraging to see that both the private and public sectors are actively and creatively pursuing green designs and related facilities. Such efforts to save more energy and resources and utilizing what nature gives to a site (e.g., daylight, natural ventilation etc.) and minimizing unnecessary interventions, would create higher quality living and work environments. Recognizing these initiatives would definitely encourage the industry stakeholders to do better in future and would strengthen the foundations for green developments.

Looking forward, we see a number of important agenda that need to be given priority to achieve a greener and more sustainable city. These include: pursuing quality urban design, increasing public awareness of green development concepts, increasing greenery in the city, creating user-friendly public space etc. Faced with the development pressure in the past decades, our city fabric has grown at extraordinary fast pace. It is perhaps the opportune time to pause and think how we can achieve not only more, but better quality of living and working space in our city.



香港測量師學會獻辭

Message from The Hong Kong Institute of Surveyors (HKIS)

在現代社會中，我們對生活的要求越來越高，在享受高生活質素的同時，我們亦要考慮地球資源的運用和保護。為著我們下一代的健康生活，亦為保存現有的生態環境，我們必須追求一個可持續發展的生活，一個更加綠化、更接近大自然的生活。

環保建築大獎2006，是為了表揚對可持續發展建設有貢獻的建築專業人士，他們通過設計、運用、保育、維修各種建築物及居住環境，為我們建立了一個更綠化、更和諧、更為可持續發展的生活平台。

Sustainable development is the hottest issue to be discussed among the world today. It is also the trend of global development. Nowadays, we have increased our expectations to the quality of life and at the same time, we need to protect the limited resources available on the earth. To wisely use the limited resources, it is time for us to consider another way of living, a greener way of living. PGBC, having collaborated with HKIA, HKIE, HKILA, HKIP and HKIS since its establishment in 2002, strives for the best ways to serve our community to create a sustainable living environment for all the people in Hong Kong.

GBA2006 aims at encouraging the building professionals, developers, property managers, etc. in creating a green and sustainable living environment. GBA2006 will be awarded to those outstanding buildings and professionals in terms of planning, design, construction, maintenance & management, and renovation of buildings, creating green and sustainable environmental excellence.

We strongly support and believe that the GBA2006 would contribute positively in promoting the awareness of green buildings across all sectors in Hong Kong and give a better understanding to the construction industry about the economic and social benefit that green buildings would bring.

