

Sustainable Campus Initiatives: The University of Hong Kong

An aerial photograph of the Hong Kong skyline, showing a dense cluster of skyscrapers and residential buildings. A semi-transparent architectural rendering of a university campus is overlaid on the image, showing various buildings and green spaces. The background is a clear blue sky with some haze.

Knowledge Network Institute of Thailand Workshop:
From Green University to Sustainable Campus

Patumwan Princess Hotel, Bangkok
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A close-up aerial view of dense green foliage, showing various types of trees and bushes. The leaves are vibrant green and the overall scene is lush and natural.

Hong Kong Special Administrative Region (SAR)

Total area: 1 104 km²

Total population: 7.15 million

Population density: 6 650 people per km²

40% country park/nature reserves

Public transportation, Container port, Airport

Fuel mix: 53% coal, 23% nuclear, 22% natural gas

Carbon footprint: 5.9 tonnes per capita

Economic overview: 93% services

Southern China / Hong Kong



Higher Education in Hong Kong

Multi-year plan:

Hong Kong as a regional hub for education

Increase access

World class universities

Improve quality, governance

Competition, increased accountability, performance-based funding

Rapid internationalization

Enhance links to Mainland China

Broaden curricula

New Academic Structure: 4-year undergraduate program

(Education Bureau, 2007; Currie, 2008; Hayhoe, 2001; K.H. Mok, 2005)

Higher Education in Hong Kong

19 degree-awarding HEIs

8 University Grants Council (UGC) funded universities:

- City University of Hong Kong
- Hong Kong Baptist University
- Lingnan University
- The Chinese University of Hong Kong
- The Hong Kong Institute of Education
- The Hong Kong Polytechnic University
- The Hong Kong University of Science and Technology
- The University of Hong Kong

3 universities ranked among top 50 by QS (2014)

Total enrollment:

- 84,800 full-time, 3,800 part-time (UG and PG, 2013-14)
- 28% non-local students (QS ranked institutions)

The University of Hong Kong ("HKU")



The University of Hong Kong

Comprehensive research and teaching university

- 10 faculties: Architecture, Arts, Business & Economics, Dentistry, Education, Engineering, Law, Medicine, Science, and Social Sciences
- ~ 100 research centres and institutes within and independent of the faculties

27,440 students & 10,770 staff

- 9,613 non-local students, 65.2% are from Mainland China
- Graduates highly sought after: Full employment in 2012 for the sixth consecutive year

Excellence in research, teaching and knowledge exchange/service

- Top recipient of the Research Grants Council's General Research Fund for the last 13 years
- Highest cumulative number of awards and largest amount of any UGC-funded institution
- 115 HKU scientists ranked in top 1% in their field by Thomson Reuters (2014)
- Over half the professoriate staff from overseas







2012-13: Unprecedented Expansion

“3-3-4” - New Academic Structure

4-year undergraduate curriculum launched in 2012-13

HKU Student body increased by 40%

Global recruitment of academic & non academic staff

Centennial Campus

75,000 m² expansion

- New Faculty buildings - Arts, Social Sciences, Law
- Learning commons, auditoria, fitness centre, shops, outdoor areas
- Hong Kong University MTR Station – December 2014

Sustainability @ HKU – Background

Early mover among universities in Asia

- Talloires Declaration (1991)
- Energy management
- Social and environmental sustainability issues

Increasing environmental challenges

- Local and regional air and water pollution
- Local water supply constraints
- Waste management crisis
- Carbon-heavy energy supply

Sustainability @ HKU – Framework

- Administration, policy and institutional commitments
- Campus environmental impacts
- Community education, awareness and student activities
- Local outreach and network development
- International outreach and network development
- Communications and sustainability reporting





Sustainability and Our Core Mission

Teaching and Learning

Home > Sustainability and Our Core Mission > [Teaching and Learning](#)

Teaching and Learning

[Teaching Highlight](#) | [Dedicated degree programmes](#) | [Sustainability Courses](#)

Courses offered by individual faculties:

- + Faculty of Architecture
- + Faculty of Arts
- + Faculty of Business & Economics
- Faculty of Education

Catering for diverse learning needs
Ethics and social responsibilities of states, corporations, and individuals
Globalization and education
Multiculturalism and Hong Kong education
Science, technology, society and the environment
Society and culture

- + Faculty of Engineering
- + Faculty of Law
- + Faculty of Medicine
- + Faculty of Science
- + Faculty of Social Sciences

In the transition to the new academic structure, new **Common Core** courses covering sustainability issues are being introduced each term. Many are taught by interdisciplinary teams in different faculties and departments.

- + China: Culture, State and Society
- + Global Issues
- + Humanities
- + Scientific and Technological Literacy

Sustainability in the built environment: A 3-part approach



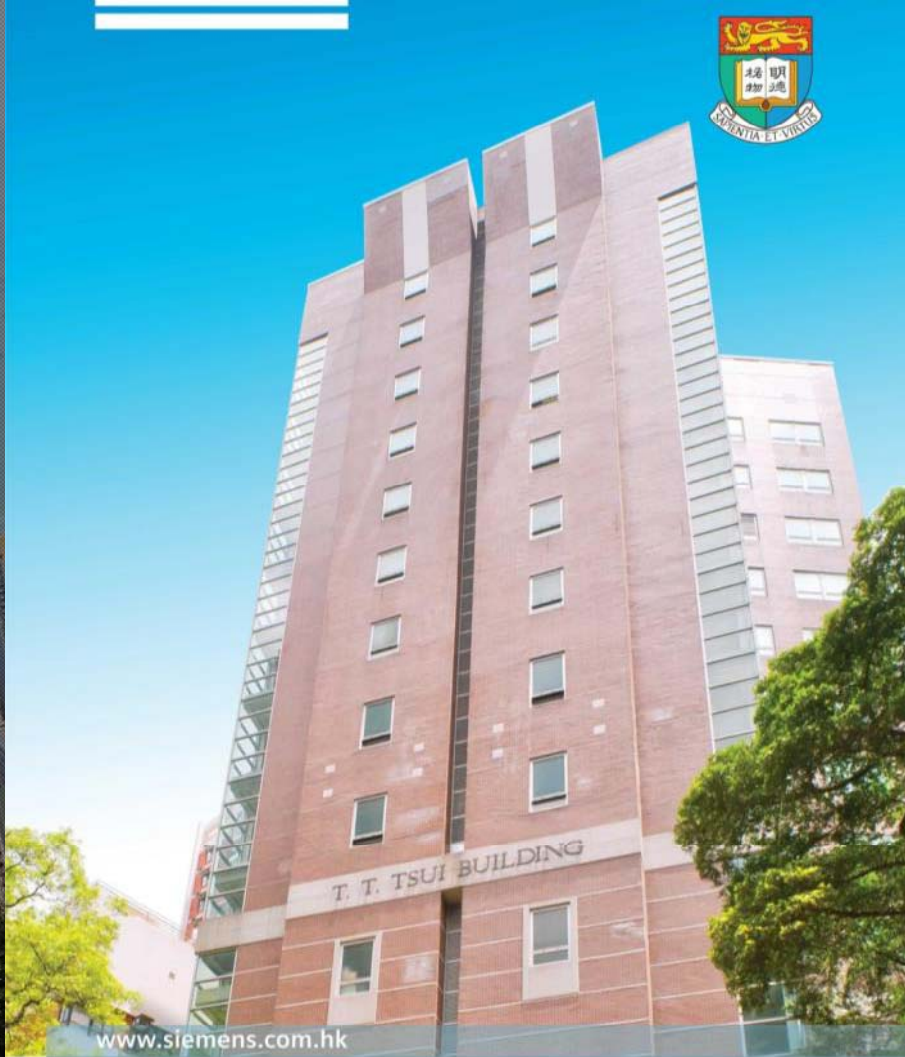
Green Design

- New Construction



Retrofitting & Maintenance

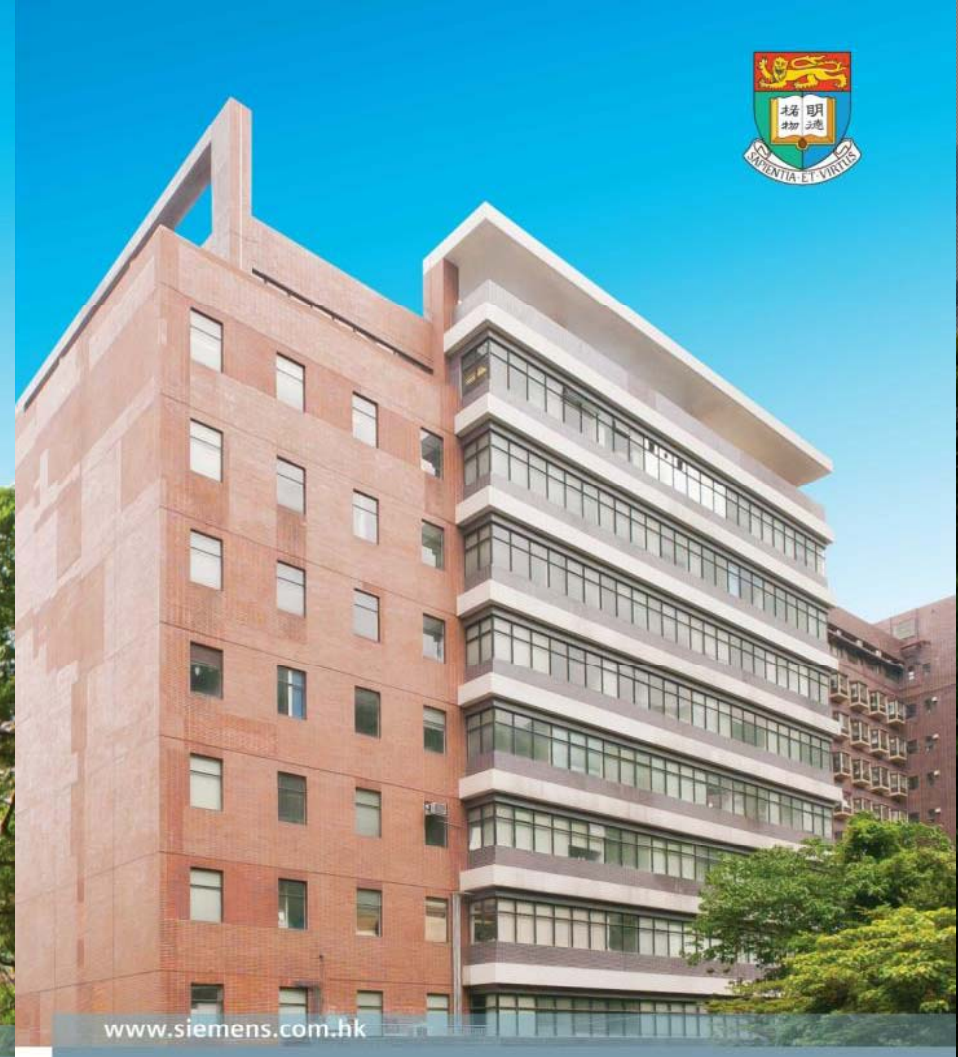
- Existing Buildings



www.siemens.com.hk

Tsui Tsin Tong Building

Reducing Carbon Emissions and pursuing
LEED Certification



www.siemens.com.hk

Chow Yei Ching building

Greening and LEED Certification of a mixed-use
Laboratory Building

Energy Performance Contract - Summary

Project Size: 18,052 m² in two buildings

Building Uses:

- CYC: classrooms, offices, engineering laboratories
- TTT: classrooms, offices, art museum

Project Cost

- Energy conservation measures: HK\$16.3M
- LEED-EBOM (green building certification): HK\$600K

Annual Savings:

- Electricity: 30%
- Annual Cost Savings: HK\$1.6M
- Annual CO₂ Reductions: 1,270 tons

Simple Payback: 8.2 years

Energy Performance Contract - Summary

Energy Conservation Measures:

Chow Yei Ching Building (CYC)

Chiller Water Plant Retrofit

BMS Upgrading with EMC

Lighting Retrofit in Main Area

Window Film

Green Roof and Condensate Recycling

T.T. Tsui Building (TTT)

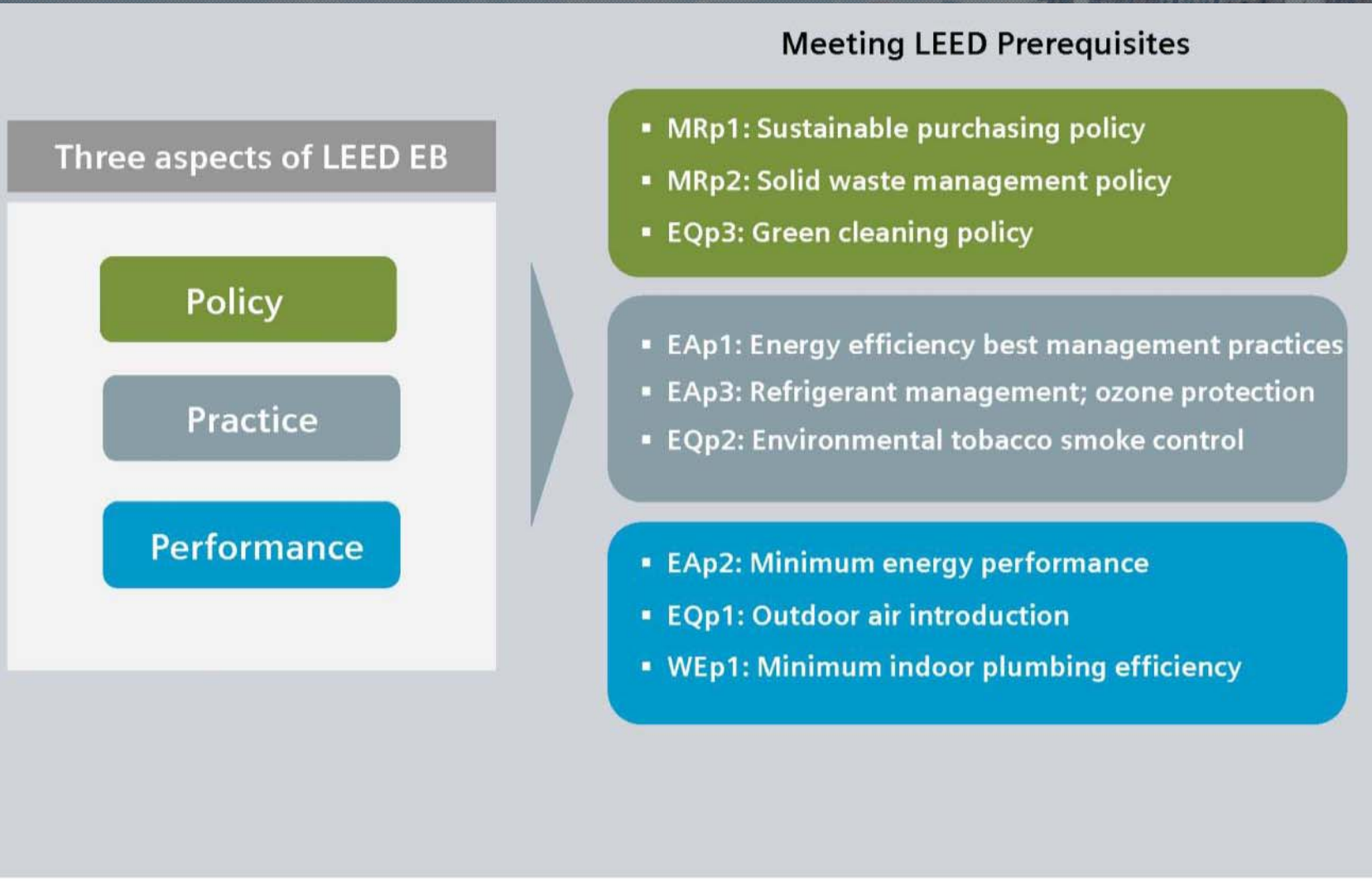
Chiller Water Plant Retrofit

BMS Upgrading with EMC

Lighting Retrofit

Dehumidification System Upgrade

Overview of LEED-EBOM Certification



Overview of LEED-EBOM Certification

Credit Categories	LEED Goals
Sustainable Sites (SS)	Minimize the impact of buildings on green spaces, wildlife habitat and water resources, protect and restore open spaces while capitalizing on existing infrastructure
Water Efficiency (WE)	Reduce the quantity of water need for a building, and reduce the strain on municipal water supply
Energy & Atmosphere (EA)	Increase energy efficiency and the use of renewable energy in buildings
Materials & Resources (MR)	Reduce the environmental impact on natural resources, and reduce and manage waste
Indoor Environmental Quality (IEQ)	Establish ideal indoor air quality, eliminate indoor air pollution and create healthy environment for building occupants
Innovation in Design/Operations (ID/IO)	Encourage and recognize innovation in green building categories not addressed by the LEED rating system
Regional Priority (RE)	Provide incentive for the achievement of credits that address geographically-specific environmental priorities



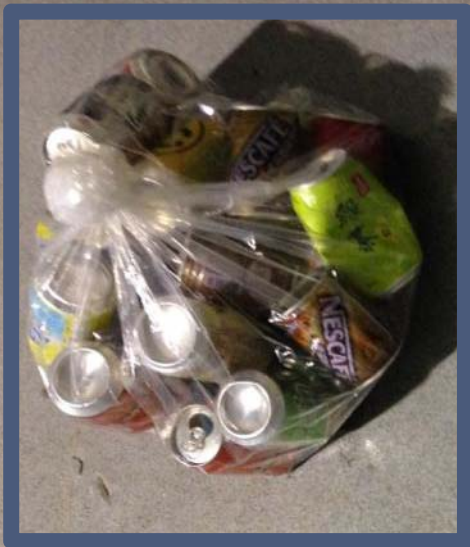
Architectural Conservation

- Historic Buildings

Waste Management Audit - June 2014



Waste Audit - June 2014



**Recycling Bins
(24 hours): 0.72
kg**



**Trash Bins (5 hours): 1.7
kg**

Student Activities





Institutional Commitments: Hong Kong Declaration (2010)



Local Outreach: Hong Kong Sustainable Campus Consortium



Hong Kong Sustainable Campus Consortium

Search this site

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Hong Kong Sustainable Campus Consortium

Established as a consortium of the Heads of Universities Committee ("HUCOM") in 2010, the HKSCC is a forum for the sharing of information and best practices among higher education institutions in Hong Kong. With participation of academic and non-academic staff from the eight UGC-funded universities, the consortium also provides a platform for reporting on environmental performance and serves as the implementing body of the Hong Kong Declaration.

Member Institutions



香港中文大學
The Chinese University of Hong Kong



香港城市大學
City University
of Hong Kong



香港浸會大學
HONG KONG BAPTIST UNIVERSITY



The Hong Kong
Institute of Education
香港教育學院



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



香港科技大學
THE HONG KONG UNIVERSITY OF
SCIENCE AND TECHNOLOGY



Lingnan 嶺南大學
University



香港大學
THE UNIVERSITY OF HONG KONG

On-going projects & Future plans

- Environmental Performance Targets: Energy, Water, Waste
- Campus-wide Strategic Planning & Risk Management
- Enhanced Communications & Stakeholder Engagement
- Education & Awareness programs
- Local outreach: Hong Kong Sustainable Campus Consortium
- International outreach: ISCN 2015 Conference

International Outreach: ISCN

The screenshot shows the ISCN website with a navigation menu and a main content area. The navigation menu includes: home, about, membership, charter & guidelines, working groups, conferences, awards, and resources. The main content area features a large image of Hong Kong with the text "ISCN 2015" overlaid. Below the image, it says "Expanding the Dialogue: Sustainability in a Connected World" and "June 17 - 19". It is hosted by "The University of Hong Kong". To the right, there are links for "SIGN UP FOR ISCN MAILING LISTS", "BUILDING A BODY OF KNOWLEDGE...A SURVEY FOR WORKING GROUP 1", "2015 HONG KONG CONFERENCE", "ISCN 2015 CONFERENCE", "WHY ATTEND?", and "WORKING GROUP CALL FOR ABSTRACTS". A sidebar on the right lists previous conference locations: HONG KONG 2015, CAMBRIDGE 2014, SINGAPORE 2013, EUGENE 2012, GOTHENBURG 2011, SHANGHAI 2010, LAUSANNE 2009, ZURICH 2008, and ZURICH 2007.

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search...

home | about | membership | charter & guidelines | working groups | conferences | awards | resources

ISCN 2015: Expanding the Dialogue

ISCN 2015

Expanding the Dialogue: Sustainability in a Connected World

June 17 - 19

Hosted by:
The University of Hong Kong



The ISCN 2015 Conference will be held in Hong Kong, a remarkable city renowned for urban density and natural beauty in a sub-tropical climate. Hosted by the University of Hong Kong, the conference will include a fast-paced, two-day program of thought-provoking keynote presentations, interactive panel discussions, and intensive working group sessions featuring leading sustainability experts and practitioners from Asia, Europe, and the Americas.

Expanding the Dialogue will address themes such as the challenges of sustainable urban development in the 21st century, regional perspectives on global change, and how universities can meet the changing needs of employers and other key stakeholders. The conference will broaden your perspective on the complex challenges of today's connected world and the search for solutions among key players in higher education, business, government and civil society. Optional half-day sessions include a pre-conference workshop and the ISCN's annual members-only summit. Following the conference, excursions to leading research centers and a cultural festival will provide a glimpse of

SIGN UP FOR ISCN MAILING LISTS

BUILDING A BODY OF KNOWLEDGE...A SURVEY FOR WORKING GROUP 1

2015 HONG KONG CONFERENCE

ISCN 2015 CONFERENCE

WHY ATTEND?

WORKING GROUP CALL FOR ABSTRACTS

HONG KONG 2015

CAMBRIDGE 2014
SINGAPORE 2013
EUGENE 2012
GOTHENBURG 2011
SHANGHAI 2010
LAUSANNE 2009
ZURICH 2008
ZURICH 2007



Every Day is Earth Day at HKU

A sustainable lifestyle is about the actions and decisions we make every day.

<http://uvision.hku.hk/playvideo.php?mid=18623>

Sustainable Campus Initiatives: The University of Hong Kong

An aerial photograph of the University of Hong Kong campus, showing a mix of modern academic buildings and traditional structures, surrounded by dense greenery and overlooking the city of Hong Kong and the harbor.

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