

HONG KONG BAPTIST UNIVERSITY

Sustainability Report

2020-21



MANAGING SUSTAINABILITY AT HKBU

Founded in 1956, Hong Kong Baptist University (HKBU) aims to be a leading research-led liberal arts University in Asia for the world delivering academic excellence in caring, creative, and global culture. HKBU has a student population of around 11,000 and a broad range of undergraduate and postgraduate programmes up to the doctoral level. Throughout the years, HKBU is dedicated to nurturing the future generations of civically engaged community members, and shouldering the responsibility to foster them with humanity and care for the natural world. As one of Asia's finest institutions of higher education, the university prides itself on the attraction for talents from all around the world, as well as a vibrant and active alumni network.

The year 2020-21 was a hard time to every corner of the world. The global COVID-19 pandemic has heightened the importance on how organisations address sustainability. Moreover, according to the National Oceanic and Atmospheric Administration, 2021 marked the 45th consecutive year with global temperatures rising above the 20th-century average, while the years 2013-2021 all ranked among the ten-warmest years on record. It is the duty for everyone to take immediate actions to address the global challenges. At HKBU, we are committed to sustainability and incorporates the key principles of environmental, social and economic aspects in our daily operations and continuous development.

Alignment to United Nations Sustainable Development Goals

In 2015, the United Nations set up 17 Sustainable Development Goals (SDGs), which aimed to call for urgent actions by every sector in the world to achieve a better and more sustainable future. It is our responsibility to support the United Nations' call by contributing our efforts towards achieving the SDGs. We align our sustainability strategy with the SDGs that are most relevant to our campus operations and development. Upon careful consideration, the University has prioritised the following four SDGs and focus our actions on these aspects.

3 GOOD HEALTH
AND WELL-BEING



7 AFFORDABLE AND
CLEAN ENERGY



11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



Our vision is to collaborate with the community in creating global and local contribution to sustainability, as well as in developing a green campus through design and operation of new development and existing buildings respectively. We aim to build a resilient and resource efficient institution, shape an environmentally friendly community, and accelerate sustainability and collaboration. Through collaboration with each other, the University continuously strives to build a more sustainable campus and community. In this report, we hope to share our commitments, key initiatives, and performance highlights towards achieving sustainability with our various stakeholders and the community.

SDG 3 Good Health and Well-being

Health Promotional Programmes

A free Medical Clinic Welcoming Programme is offered to students of the University regularly. The Programme covered height and weight measurement, blood pressure and pulse measurement, colour vision and visual acuity examination and health questionnaire review. Through collaboration with a local medical institution, the University students, eligible staff and their family members could receive 9-valent Human Papillomavirus vaccination and/or seasonal influenza vaccination at a concessionary rate. *[Note: The programme was last held in August – September 2022.]*



The University regularly holds seminars and webinars to students on sexual and reproductive healthcare topics. Healthcare specialists are invited to share the knowledge and experience to students for education. *[Note: Although sexual and reproductive healthcare topics were also conducted in many secondary schools in Hong Kong, the last webinar conducted in June 2022 got 42 participants attended.]*

Health Services

The University provides on-campus health and medical services to the University community and off-campus dental services. Medical services are available at the University Health Services Centre located on Ho Sin Hang Campus, where the clinic is operated by a medical group (which contracted with the University). The University Health Services Centre is accessible to students, eligible staff and their family members. In addition, Chinese medicine clinical service is provided to students, eligible staff and their family members at a special discount at the clinic located on Baptist University Road Campus and at the off-campus clinics, which are operated by the University's School of Chinese Medicine.



Medical and Dental Services

The University provides quality healthcare services to students, eligible staff and their family members who can use on-campus and off-campus medical and dental services subject to their needs.

[<more>](#)



Chinese Medicine Clinical Services

The University collaborate with the School of Chinese Medicine in providing Chinese medicines clinical services to staff, students and the public. Special discounts are offered to students and staff.

[<more>](#)

SDG 7 Affordable and Clean Energy

Five-year Energy Efficiency Plan (2020-2025)

To ensure steady progress to reduce energy use and to achieve a more energy-efficient campus for the University community, the University has put forward a five-year energy efficiency plan (2020-2025) targeting for improvement in building energy efficiency for new and existing buildings, adoption of smart technology for reduction of energy consumption, and conducting of energy review to keep track of energy consumption.

1. Upgrade Buildings to Higher Energy Efficiency	
Green Building Policy	HKBU established a <i>University Green Policy for Capital Projects and Major Addition and Alteration Projects for University Campus</i> in 2021. The Policy applies to every new building and major renovations within the campus that shall be designed and constructed in an environmentally friendly manner achieving “Gold” rating or above under the BEAM Plus New Building Assessment or the optimum rating under the BEAM Plus Fitting Out Assessment, both certified by the Hong Kong Green Building Council.
Retrofitting	Retrofit upgrade and modify the energy performance of existing building assets to improve energy efficiency or decrease energy demand for their ongoing life.
Retro-commissioning (RCx)	The University is deploying external RCx professional to conduct detailed and systematic examination of building’s energy performance on campuses in order to identify areas of

	optimisation for reducing energy costs and improving the indoor environment.
Renewable Energy	Approximately 1,800m ² of solar photovoltaic (PV) panels will be installed on the Kowloon Tong campus, and the projected annual power generation will be around 450,000 kWh. The PV project has been recognised under the Renewable Energy Feed-in Tariff (FiT) Scheme of CLP Power Hong Kong Limited.

2. Plan to Reduce Energy Consumption	
Smart Technologies for Building Management System	The University is evaluating the potential of implementation of smart campus system utilising Internet of Things (IoT) technologies in order to reduce electricity consumption through big data analytics, smart control of equipment and optimisation of equipment performance.
Smart Housing Management at Student Residence Halls	The University is evaluating the feasibility of implementation of smart housing management at the Student Residence Halls to enhance the awareness of residents about energy conservation and sustainable solutions.
Smart Classrooms Project	A total of 67 classrooms undergo the transformation into smart classrooms by upgrading the audiovisual equipment and installing motion sensors for on/off control of space lighting and air-conditioning. <i>[Note: As of summer 2022, a total of thirty-six classrooms were transformed into smart classrooms.]</i>
Occupancy Sensors at Open Plan Office	Occupancy sensors will be installed in all newly renovated open-plan offices for smart control of lighting and air-conditioning system.

3. Carbon Reduction and Energy Wastage Identification

Periodic External Energy Audit	Energy audits were conducted in two buildings on the Kowloon Tong campus by an external energy auditor in 2020. It is planned that all the buildings on all campuses will be audited on a rotational basis by 2025.
Annual Internal Carbon Audit	An annual carbon audit is conducted internally to keep track of energy consumption and identify areas for improvement.
Review of Hours of Supply of Air-conditioning	The air-conditioning supply hours for offices and laboratories will be reviewed to optimise the usage during non-office hours. <i>[Note: The default air-conditioning supply hours for all non-academic office premises on campus had been reviewed and was reduced by 10 hours per week in June 2022.]</i>

Performance Indicators Against Baseline Year and Previous Year

Benchmarked against the baseline year 2016-17, all the performance indicators have improved, as a result of the implementation of various sustainability policies and projects.

Performance indicators		2020-21 Against Baseline Year (2016-17)	2020-21 Against Previous Year (2019-20)
Greenhouse gas (GHG) emissions	Per GFA (tCO ² e/sq.m.)	-32.87%	-19.33%
	Per capita (tCO ² e/FTE)	-35.08%	-18.42%
Energy consumption (Note)	Per GFA (kWh/sq.m.)	-9.88%	+2.70%
	Per capita (kWh/FTE)	-13.04%	+3.57%
Water consumption	Per GFA (c.m./sq.m.)	-18.11%	-9.54%
	Per capita (c.m./FTE)	-20.92%	-8.50%

Note: The energy consumption was increased slightly when compared with 2019-20, resulting from the higher rate of air ventilation as a measure implemented to fight against the COVID-19 pandemic, where the effect brought from the enhanced health and safety measure was offset partially by the series of energy reduction initiatives.

SDG 11 Sustainable Cities and Communities

Energy-efficient Renovation and Building

Over the years, the University has undergone expansion and renovation continuously. Campuses and buildings are built in accordance with various principles and requirements, and technologies are used to meet sustainability standards. HKBU has established the *University Green Policy for Capital Projects and Major Addition and Alteration Projects for University Campus* to demonstrate the commitment of the University to continuously improving the sustainability performance and promoting responsible behaviour on campus to combat global warming. The Policy applies to every new building or renovations within the campus that shall be designed and constructed in an environmentally friendly manner, following the well-known green building standards such as BEAM Plus certification scheme. Apart from that, the University avoids building new construction on greenfield sites where possible. For instance, the Jockey Club Campus of Creativity (JC³) is being built on the former institutional campus site.



Automatic Doors

Existing washroom access doors on the Kowloon Tong campus and the Kai Tak campus have been replaced by and modified to automatic doors to provide barrier-free access and hygienic solution for users to pass through doorways.



Jockey Club Campus of Creativity

The JC³ is being built in conformance to BEAM Plus New Buildings attaining to Gold rating under the certification scheme, which incorporates smart and green features (including energy-efficient design for air-conditioning, lighting, as well as lift and escalator systems).

[<more>](#)

Sustainable Commuting

HKBU implements various initiatives to promote sustainable commuting.



Electric Vehicles (EV) Charging Facilities

There are 12 EV chargers on campus. The University targets to extend the smart charging facilities for electric vehicles in 64 parking spaces covering 30% of the car parking spaces for private cars on all University campuses by 2026. Medium EV chargers will be installed in all 29 parking spaces on the JC³ in 2024 as the first phase of the project.



Motorcycle and Bicycle Parking Facilities

Motorcycle and bicycle parking facilities are provided on campus to facilitate people opting for low-carbon commuting.



Public Transportation

To encourage sustainable commuting through public transportation, signage is provided on campus indicating the direction of the nearest Mass Transport Railway (MTR) stations.

The Kowloon Motor Bus Co. (1933) Ltd. (KMB) places a KMB Fare Saver at the entrance of Shaw Tower on the Kowloon Tong campus. Students, staff and the public are all welcome to enjoy a fare discount by tapping their Octopus Card at the Fare Saver.

SDG 12 Responsible Consumption and Production

Management of Hazardous Substances

Management and disposal of hazardous substances are tightly controlled on campus. The online DGMS (Dangerous Goods Management System) has been in place since 2004 to control the use of chemicals and dangerous goods (DG) on campus. Enhancement on the DGMS was completed to standardise data format and enable easy information exchange.

A feasibility study on enhancement of DGMS by real-time location tracking technology was conducted with the aim of further improving the overall effectiveness of chemical safety management and regulatory compliance monitoring. The study provided a roadmap for possible enhancements to cater for the increasing research activities according to the University's *Institutional Strategic Plan 2018-28*.

Minimisation of Plastic Use and Disposable

Items

The University has made steady progress in minimising plastic use and disposable items, as well as encouraging sustainable and responsible consumption. Various policies are in place to promote sustainable behaviours among the University community.



Green Event Regulations

A set of Green Event Regulations has been formulated to reinforce sustainable practices when University events are organised. Students and staff are urged to follow the regulations to minimise single-use disposable waste, minimise food waste, and conserve energy and resources.

[<more>](#)



No Straw University Campaign

90% reduction in straw consumption has been recorded since the implementation of the No Straw University campaign. The campaign is well received by the University community and at the same time the revenue from straw requests collected by the caterers is, in fact, minimal.

[<more>](#)

Green Catering Practices



Pay \$1
for each straw



Get Discount
for bringing your own
reusable tumbler/mug to
Coffee Shops



Save \$1
for ordering less rice

Green Catering Initiatives

We encourage students and staff to develop green eating habits. We aim to reduce the waste generated from catering through the adoption of various measures and initiatives.

[<more>](#)



Increasing Water Bottle Filling Stations

More water bottle filling stations have been installed on campus for the University community. These stations provide users with safe, convenient and free drinking water without using disposable plastic bottles.

[<more>](#)

Waste Disposal Measures and Waste Reduction

In the frame of the University's continuous commitment to reducing use of resources and waste generation, various policies and pilot projects are in place to promote sustainable behaviours among the University community. The University is currently treating municipal solid wastes and recyclables separately by providing different recycling facilities on campus to encourage recycling and reduce the amount of wastes ending up in the landfills. Satisfactory results were noticed as compared against the baseline year 2016-17, the municipal solid waste was reduced by 29%, while the recyclables was upped by 99%.



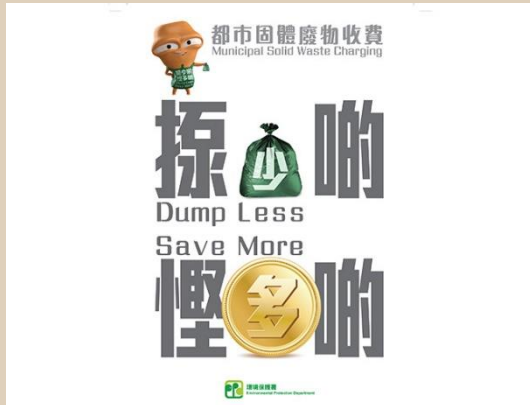
Regular Waste Audits

Regular waste audits are performed to analyse the waste generated on campus. Data collected are studied and used in policies planning in relation to waste management and reduction.



Collection of Recycling Data

Recycling data are regularly collected from downstream recyclers to study the recycling trends and behaviours of the University Community.



Municipal Solid Waste Charging – HKBU Waste Reduction Scheme

To prepare the University for the Municipal Solid Waste Charging Policy, which is not under the preparatory period, a six-month pilot scheme involving four buildings on the Kowloon Tong campus is underway to collect data and identify current practices such that waste reduction strategies can be better formulated. Over the course of the project, the University's partnering organisation, namely Food For Good, is also organising promotional campaigns and education activities to promote waste reduction on campus.

University Green Café (University Recycle Centre)



A modern Green Café (University Recycle Centre) of approximate 30m² will be built on the ground floor of Jockey Club Academic Community Centre/Madam Chan Wu Wan Kwai School of Continuing Education Tower. Smart recycling machines, which are capable of recycling 10 different types of recyclables, will be installed with seating provided.



Minimisation Policies Extended to Caterers

The University's minimisation policies also apply to the outsourced catering outlets on campus. For instance, caterers are required to separate food waste for recycling and provide biodegradable takeaway boxes as far as practicable.