

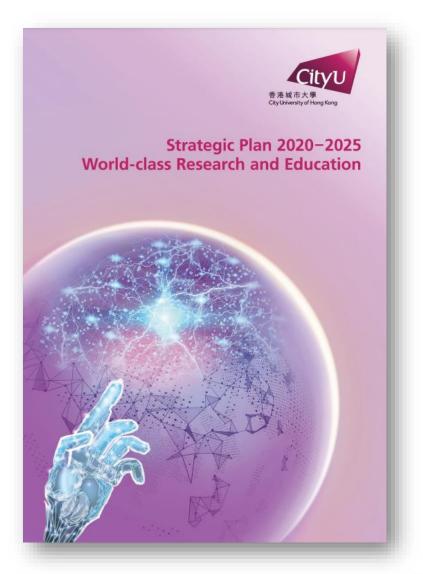
Achievements in Sustainable Development

2020-2021

專業 創新 胸懷全球 Professional・Creative For The World

Facilities Management Office

Strategic Plan and KPI



As stated in the Strategic Plan 2020-2025, CityU is committed to promote a green campus and sustainability initiatives

- 1. Continue to promote a sustainable green campus in response to the global climate emergency, and to formulate and implement policies for the University towards the ultimate goal of becoming carbon-neutral.
- 2. Expand collaborations among units to enhance sustainability and student engagement to develop a model for a green campus that can be shared across Hong Kong and the region.
- 3. Expand sustainability education.

Key Performance Indiccator (KPI)

To achieve a carbon-neutral campus, our immediate focus will be placed on carbon reduction by enhancing the energy efficiency of both new and existing buildings. Using the baseline year of 2018/19, we target a reduction of 8% of Green House Gas (GHG) Emission per floor area (e.g., direct GHG emissions/removals and energy indirect GHG emissions) on campus by 2030.

	2020-2021
% Change in GHG Emissions per floor area compared with baseline year (2018-2019)	-23.08%

Energy Saving Charter

The University continued to sign up for the "Energy-Saving Charter 2020" which was co-launched by the Environment Bureau (ENB) and EMSD. By signing the Charter, the University was committed to switch off electrical appliances and systems when not in use and procure energy efficient electrical appliances (such as those with Grade 1 energy labels, fridge with door) and systems from June 2020 to May 2021. FMO issued energy saving tips on switching off appliances and systems when not in use:

- Lights, air-conditioners should be switched off in areas that are unoccupied. With few people working in the office, switch off the non-essential lighting and use task lighting to directly illuminate work areas.
- Part of lift and escalator can be idled during non-peak hour.
- Use appliances with timer control or automatically switch-off control functions to avoid leaving appliances in standby mode for a long period.
- Unplug all equipment chargers and adapters when they are not in use. Please read leaflet on <u>Reducing Standby Power Consumption</u>.
- Switch off the computer screen can save more energy instead of letting the "screen saver" run.
- When leaving office, arrange for the last-man-out to check and switch off the power source to all air-conditioner, lighting and office equipment that are not in use.



Forum on Clean Energy and Nuclear Safety - 10 Years after Fukushima

Thirty eight world-leading scholars, industry leaders and policy makers from around the world debated recent advances in low-carbon energy technology and nuclear safety in a specially convened online Forum on clean energy and nuclear safety on 10 March 2021.

This event was co-hosted by CityU, National Tsing Hua University, Seoul National University, and Tokyo Institute of Technology. Titled "Clean Energy and nuclear safety – 10 years after Fukushima", the Forum offered two streams, namely clean energy and nuclear safety, and approximately 2,500 participants from over 20 countries and territories participated.

At our disposal is a suite of options called the "rainbow energies", argued President Way Kuo of CityU, a Member of the US National Academy of Engineering and General Chair for the Forum. These rainbow energies include hydropower, fossil (coal, oil and natural gas), nuclear, wind, solar, biofuel, and others (geothermal, ocean energy and marsh gas).

Upon reviewing the Fukushima crisis in March 2011, the ensuing discussions debated workable suggestions for tackling climate change, thus turning the possibility of a carbon neutral world by 2050 into a reality, according to President Kuo.



The Forum also covered clean energy, including renewable energy generation, storage including new batteries and hydrogen fuel, and utilisation such as smart energy management systems and energy saving applications.

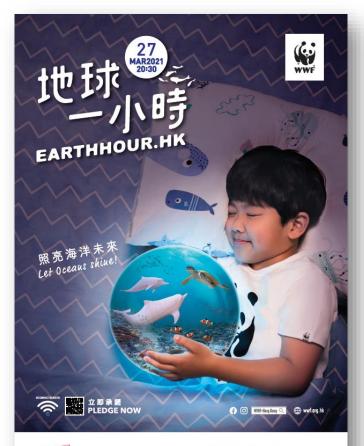
WWF Earth Hour 2021

CityU has always supported the WWF Earth Hour campaign held and so as this reporting period. On 27 March 2021, the University turned off non-essential lights in corridors, open / roof gardens, carparks and / or external public areas at YEUNG, Administration Buildings, BOC, LI, LAU and CMC for one hour from 8:30 pm to 9:30 pm.

Moreover, CityU Announcement Portal (CAP) was used to inform all staff and students to encourage them and their families to support this meaningful event by turning off lights in office and at home with the aim to arouse awareness on global warming, energy saving, and reducing emission of pollutants and greenhouse gases.

Earth Hour is the largest global environmental movement that enjoys enthusiastic participation from a wide cross section and major sectors in the community.

The theme for Earth Hour 2021 is "Let Oceans Shine". The theme spotlights the beauty and intrinsic value of our marine environment – and the threats facing it: from plastic marine litter, unsustainable fishing, to runaway development.





承诺支持世界自然基金会地球一小时 IS COMMITTED TO WWF'S EARTH HOUR



Charter on External Lighting

CityU signed the Charter on External Lighting and received the Platinum Award 2020. The Charter was launched by ENB in 2016. Owners of and responsible persons for external lighting installations were invited to switch off lighting installations of decorative, promotional or advertising purposes which affect the outdoor environment during the preset time (i.e. 11 p.m. or midnight to 7 a.m. on the following day).

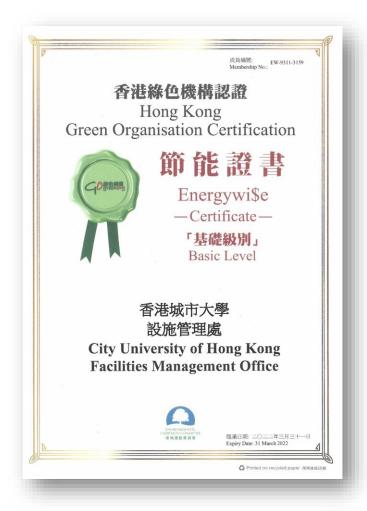


Hong Kong No Air Con Night 2020

It was the 11th year that Green Sense organized Hong Kong No Air Con Night 2020. It was held on 9 October 2020 and was a 12-hour-long air-conditioning out action starting from 7:00 pm on 5 October 2019 to 7:00 am on 6 October 2019 to encourage the entire society to save energy.



Hong Kong Green Organisation Certification - Energywi\$e Certificate



Commendation Scheme on Source Separation of Commercial and Industrial Waste – Silver Award Hong Kong Green Organisation Certification – Wastewi\$e Certificate





FMO has developed an electronic "Chemical Control System" (CCS) for University members to purchase chemicals on campus. The system not only helps the University in compiling regulatory requirements on use of chemicals but also reduces the use of paper during the chemical purchase process.

CCS is a cloud-based online system. Only authorised users or registered chemical purchasing delegates can purchase chemicals through the system. In the reporting period, about 8,500 orders were made via CCS. Assuming 2 sheets of A4 paper are saved in a purchase process, a total of 17,000 sheets of A4 paper were saved in the reporting year which is equivalent to 85 kg of paper or 1.5 trees.

In addition, by using the system, there is a better control on use, storage and disposal of chemicals; hence helps reduce the wastage and generation of chemical waste.

Get quotations from suppliers electronically (1 sheet of A4 paper saved)

Make chemical purchase requests in CCS

Electronic workflow of chemical purchase orders

Aprove the requests in CCS

Purchase orders to suppliers using email via CCS / **Finance Office** (1 sheet of A4 paper saved)

> Chemical Receipt Point 3442 8858 fmocct@cityu.edu.hk

Be Safe, Be Compliant Use the CCS Starting on 27 July 2020, purchase of hazardous chemicals shall be made using the Chemical Control System. Service Portal hemical Control System **Facilities Management Office** The Service Portal can be accessed on the FMO website under Useful Information HSP 014/20200

Facilities Management Office

香港城市大學

Cityu

Lai See Packets Recycling

With the aim to reducing wastage by reusing some of the materials so as to contribute to a greener Hong Kong, CityU continued to support the "Lai See Reuse and Recycle Program 2021" organised by Greeners Action to collect used Lai See packets from 8 locations located at YEUNG, LI, LAU, CMC, Student Residence, TCY and NSY during the period from 18 February to 3 March 2021. 51 kg of Lai See packets were collected for reuse.



10

Greeners Action

Mooncakes Collection and Donation

CityU joined the "Eat Wise Charter" of the Green Mid-Autumn Festival Campaign organised by Food Grace (食徳好) to collect mooncakes for the contribution to reduce food waste. A total of 16 surplus mooncakes were collected and sent to Food Grace for redistribution to the needy before the Mid-autumn Festival. The event was successfully held and received support from more than 200 estates, shopping malls, commercial buildings and companies. More than 8,000 pieces of mooncake were donated to the needy.







Books Give and Take

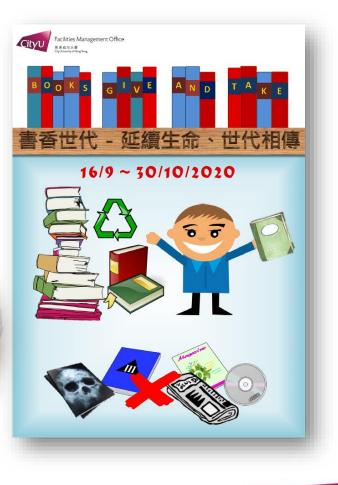
Although COVID-19 affected our lives a lot and most of activities have been suspended on campus. With careful consideration and sufficient anti-pandemic measures, for the 4th year CityU organised the "Books Give and Take 書香世代 - 延續生命、世代相傳" campaign. Two carts were placed at the Yellow Zone on U-concourse, YEUNG. CityU community members and public were welcomed to leave or pick up books from the carts with no loan period.

Overwhelming responses were received. In addition to the books taken away by interested people, three carton boxes of 247 surplus books that weighed 101 kg were donated to Sham Shui Po Green Community to continue their lives for the contribution to the local community.





Anti-pandemic measures applied



Promotion Campaign with Community Smart Recycling Vehicle (CSRV)



The CityU community was given a chance to experience smart recycling on campus and at Student Residence. The Promotion Campaign with Community Smart Recycling Vehicle was co-organised by EPD and FMO. Another session of the Campaign was co-organised with Student Residence Office at Student Residence.

The CSRV is the initial phase of the Pilot on Smart Recycling System (the Pilot) that launched by EPD. The Pilot aims to promote smart city development and to introduce progressively smart recycling facilities in the community. The CSRV is equipped with a set of 4-compartment smart recycling bins and a set of gift redemption unit to promote Smart Recycling System which can automatically measure and record the weight of recyclables collected and has an overflow alert installed to enhance bin usage and management efficiency.

Co-organizers: Facilities Management Office

3/----

Promotion Campaign with Community Smart Recycling Vehicle (CSRV)



CityU is the first local University to co-organise the Campaign with EPD. The Campaign received overwhelm responses and more than 400 students and staff members participated in the Campaign. They have got in to the CSRV to experience the smart bins and gift redemption unit.



Student Residence

CityU FMO endeavored the University's efforts in minimising waste and reusing materials. Examples included:





Wind breaking devices at outdoor security booths in winter time



Reuse of event foam boards for various purposes, such as decorative foam boards and handheld props.

.5/

Potted plants including evergreen plants and seasonal flowers provided for major university events and festivals were reused at other areas on campus (e.g. Commencement, Christmas and Chinese New Year).







Cityu

In order to reduce landscape waste, evergreen potted plants for events were re-used or maintained at nursery on campus while of used potted plants were planted in landscape areas.



Wood chips shredded from branches and stems through the process of pruning and felling were used in landscape areas for mulching purpose. About 270 kg mulches were produced during the reporting period.



Food Waste Reduction and Recycling

Mini food decomposers are used at residential quarters to recycle food waste into fertilizers to help conserve limited landfills. Over 500 kg of food waste was recycled into 59 kg of fertilizers which were placed in landscape areas on campus.



Mini food decomposer used in staff quarters for recycling into fertilizer

Joint-U Campaign 2021 – UNIfy: Sustainable Living #New Normal Edition



The pandemic and the new normal have inspired new ways of living and reflection about the relationship between people and nature.

Following the success of the Joint-U online event "Unify: Sustainable Living #StayAtHome Edition" held in 2020, the eight member universities of Hong Kong Sustainability Consortium for Campus (HKSCC) decided to continue this meaningful online campaign to once again actualise the beauty and power of synergy.

Joint-U Campaign 2021 –

UNIfy: Sustainable Living #New Normal Edition

A series of themed online experiences and events have been held. The following themed events were organized in each week of March 2021.

- 1) Mind Body Soul, channeling your inner self through meditation and exercises;
- 2) Environmental Psychology, deciphering our daily decision-making and behaviour;
- 3) Agriculture, connecting with our local farmers and telling stories of the land, city and food; and
- 4) Waste Reduction, exploring the possibilities of recycling with smart features.

Post events surveys were conducted after each themed event. A total of 387 staff and students participated in the Campaign. 94% respondents were satisfied and agreed that the events enhanced their awareness of and knowledge on sustainable living and development. Most of them also preferred the approach of online real-time activities and they were interested in climate action, energy saving & smart city, food and agriculture.



Joint-U Environmental Behavour Survey



After a year of preparation, the working group of HKSCC on the Campus Environmental Sustainability Index has prepared a questionnaire survey and launched the survey in the end of 2020. The survey was about personal green habits and the sustainable development performance of the Universities. Undergraduate students were invited to do an online survey. The questionnaire consisted of 60 questions that covered the following areas:

- 1) Sustainability Knowingness;
- 2) Sustainability Attitude;
- 3) Resource;
- 4) Waste;
- 5) Engagement;
- 6) Catering.

The survey was held successfully. Over 4,000 students completed the survey. Of the respondents, 65% were female, 77% were local students, and year 1 students had the highest response rate at 28.8%.

Joint-U Environmental Behavour Survey

From the survey, environmental behavior of undergraduate students was analysed. The following are the major findings:

- 1) Agree that reducing water is necessary for sustainable development;
- 2) Have a good attitude about having stricter laws and regulations and taking measures against problems related to climate change;
- Have the best behavior with respect to the conservation of electricity and then avoidance printing and pressing the reduced flush button in the toilets;
- 4) However, they haven't yet adopted the efficient paper usage strategy of reusing single-sided paper for printing;
- 5) They agree to save paper using electronic submission for assignment and prefer reusable paper collection boxes near printing devices;
- 6) However, they wouldn't like to reducing printing quota;
- 7) They are most active in waste recycling behaviour rather than waste reuse and packaging but the do reuse packaging materials;
- 8) They do try to only order what they can consume and prefer to have better food waste separation facilities;
- 9) They are less interested in buying organic food and practicing a vegetarian diet;
- 10) They are interested in collaborating with external environmental groups;
- 11) They prefer social media for promotion of environmental activities; and
- 12) They can try to have donation boxes for unwanted clothes.



Indoor Air Quality (IAQ)

A total of eight buildings on campus obtained the "Good Class" IAQ certificate. Seven of the eight buildings have obtained the certificates three years in a row. The seven buildings are YEUNG, LAU, CYC, Administration Building, FYW, MMW and CMC. LI obtained the "Good Class" certificate under the new IAQ certification scheme in the reporting year.



Jockey Club One Health Tower BEAM Plus NB V1.2 – Provisioznal Gold



Hong Kong Awards for Enironmental Excellence 2020 (HKAEE) – Certificate of Merit and Hong Kong Green Organisation



Hong Kong Green Day 2020

As supporting organisation of Hong Kong Green Day that organised by Green Council.



Safety Performance Award – Outstanding" in the "19th Hong Kong Occupational Safety and Health Award





Exercise is Medicine – 2021 Gold Ccampus

