



SUSTAINABILITY REPORT 2024

In Celebration of the 30th Anniversary



INTRODUCTION

Located in the heart of the metropolis, City University of Hong Kong (CityUHK) possesses a well-earned reputation as a highly innovative hub for promoting research and professional education, addressing global issues and empowering positive change.

Committed to championing a green, sustainable environment, the theme “Campus Growth & Sustainability” is embedded in our 5-year Strategic Plan while effective strategies for sustainability, incorporating social, economic and environmental principles, have been deployed for over a decade. Our desire to create a self-sustaining campus, one that draws on the latest developments in green technology, ensures the continuation of our pivotal role in enhancing sustainability.

We are, at all times:

- integrating sustainability into university education;
- exploring sustainability challenges through research; and
- minimising waste and promoting resource conservation in our campus operations

EXECUTIVE SUMMARY

Our Sustainability Report provides an overview of how CityUHK sets out to address the UN’s 17 Sustainable Development Goals (SDGs). It details specifically how teaching and learning, research, on-going activities and community engagement related to the demands of the SDGs provide a roadmap for how we establish a network of effective linkages between higher education, industry and government interests in Hong Kong. Our aim is to convey our passion for supporting the all-important SDGs, take stock of our current endeavours and identify areas where we can improve. This is why this exercise has been so useful, enabling us to look to the future and strategically formulate plans that will further enhance our SDG commitment. We conclude that supporting SDGs is a full-time and necessary duty and one that we will continue to uphold.



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1 NO
POVERTY



END POVERTY IN ALL ITS FORMS EVERYWHERE

TEACHING AND LEARNING

We offer academic courses relevant to SDG 1. Altogether, 23 related courses were available in 2023/24. “Poverty and the Politics of Aid” in the Department of Public and International Affairs explores poverty, aid and allocation, emerging trends and ethical dimensions in development. From gender dynamics to microfinance, food insecurity, and south-south cooperation, this course equips students with a nuanced perspective on the intricate interplay between global aid mechanisms and local contexts.

105 
research papers
(2019–2023)

RESEARCH

We published 105 research papers related to SDG 1 between 2019 and 2023.

We believe that empirical research helps the public better understand poverty issues and provides evidence for enhancing policy, especially on topics related to transitional housing, homelessness, the impact of housing on well-being, deprivation, and multidimensional poverty.

We study the impact of housing on well-being, develop [evidence-based research](#) on informing anti-poverty policy and practice, and promote exchange among academics, policymakers, social workers, and students on housing and welfare policy and service delivery.

In addition, we co-organise the Urban Graduation Approach to Uplift Poor Households Project (JC PROJECT LIFT), which was created and funded by The Hong Kong Jockey Club Charities Trust. This project, which runs from 2023 to 2028, implements a targeted, multitudinous and time-bound poverty alleviation model called the Urban Graduation Approach. The aim is to help lift poor households living in transitional housing out of poverty.



CityUHK provides on-going on-the-job training and individual supervision for the Family Capacity Building Planners for JC PROJECT LIFT.



Ming Gor (middle), the owner of the restaurant Pei Ho Counterparts in Sham Shui Po, located near CityUHK, uses donated CityUHK goods for helping to provide free meals to those in need.

ON-GOING INITIATIVES

Our Financial Assistance Scheme offers bursaries and interest-free loans to local students facing financial hardship. This scheme supplements the Government Financial Assistance Scheme. Our awards, donated by private organisations and individuals, are allocated on a need basis. Altogether 59 financial aid schemes (including general bursaries, emergency bursaries and loans) were awarded in 2022/23, while 393 awards worth HK\$5.04 million were granted.

In addition, students facing unforeseen circumstances have access to emergency funds throughout the academic year via Student Development Services.

Donation to local community



264 kg of clothes



192 kg of books



184 kg of organic farming food

Source: Environmental Report 2022/23

COMMUNITY ENGAGEMENT

Our CityU Tiger@Community: [Food Recycling Tour](#) encourages the public to better appreciate the challenges that the underprivileged encounter in Hong Kong, while [GROW](#), a sustainability project on promoting urban rooftop farming, donates organic farming food to those in need.

As one of the incubation partners of [JC PROJECT LIFT](#), CityUHK will collaborate with 18 partners to assist families living in transitional housing to grasp new opportunities in future social development and new possibilities for a better life. CityUHK will develop the Family Capacity Framework for customising plans tailored to each household's specific strengths and needs. It is expected to benefit approximately 14,000 families in 25 transitional housing projects across the city.



2 ZERO HUNGER



END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION, AND PROMOTE SUSTAINABLE AGRICULTURE

TEACHING AND LEARNING

In 2023/24, CityUHK offered 7 courses relevant to SDG 2. Students engage with global social ideas in the “Food Security and Sustainability” course in the School of Energy and Environment. They develop a broader perspective and critical understanding of the social, economic and environmental components of sustainability in relation to

global food safety and security, covering food supplies, food production, food safety, food economics, and its associated environmental impacts. Field trips expand students’ horizons on sustainable food development with particular emphasis on the costs associated with maintaining food safety to international standards for locally produced and imported food.

RESEARCH

We published 79 research papers related to SDG 2 between 2019 and 2023.

[The Centre for Applied One Health Research and Policy Advice](#), which was established at the Jockey Club College of Veterinary Medicine and Life Sciences in October 2016, conducted a major research project “One Health Poultry Hub” to address the SDGs 1 (No Poverty), 2 (Zero Hunger) and 3 (Good Health and Well-being), and contribute to 5 (Gender Equality), 6 (Clean Water and Sanitation), 9 (Industry, Innovation and Infrastructure), 11 (Sustainable Cities and Communities), and 12 (Responsible Consumption and Production). The project, which operates in Bangladesh, India, Sri Lanka and Vietnam, has received £19 million in funding for 5 years starting March 2019.

£19M

funded by Global Challenges Research Fund, UK Research and Innovation for Project “One Health Poultry Hub”



(Top) Mr John Lee, Chief Executive of the HKSAR Government (far right), and President Freddy Boey of CityUHK (far left) at the CityUHK booth at the Well-Wishing Night Market in Lam Tsuen, Hong Kong during the Chinese New Year festivities in 2024.

(Bottom) CityUHK’s dairy products at the Lam Tsuen Wishing Night Bazaar.

Roof-top garden at the Li Dak Sum Yip Yio Chin Academic Building.



ON-GOING INITIATIVES

Food scholars and practitioners interrogated food problems during the pandemic at CityUHK's conference on "Food and Sustainability: Local Food System, Food Policy and Global Engagement" in August 2022.

Promoting sustainable agriculture, [GROW](#) applied for an Organic Production certification for our roof-top garden at the Li Dak Sum Yip Yio Chin Academic Building. All related growing activities from now on must accord with the certification guidelines.

GROW:

over
400 students with
direct growing
experience

1st organically
certified
university rooftop
in Hong Kong

**66m² >
140m²** doubled land
area since 2015

COMMUNITY ENGAGEMENT

[GROW](#) donates organically farmed food to the needy and promotes a sustainable community by collaborating with university departments, local organisations, schools, local farms and the public. Workshops let CityUHK students experience organic farming first-hand and we host site tours for visitors from within and outside Hong Kong. Additionally, we visit farms at other universities and communities to learn from them and help each other.

Our "Green Mid-Autumn Festival Food Saving Pledge", co-organised with local Hong Kong, NGO Food Grace, promotes sustainability and caring for those in need, pledging to refrain from using and receiving mooncakes as gifts and reducing food wastage during the Mid-Autumn Festival. This programme comes under our "Green Living @ CityU 2023" campaign.

We have launched "The Future of Food: Seeking Sustainable Solutions" series with the backing of Rabobank since 2022. The series exposes audiences to innovative thinking and offers information about future food scenarios and especially the potential to design a more sustainable food system.

CityUHK is the first university in Hong Kong to introduce and practice the pioneering concept of One Health. The opening of the dairy farm in Lam Tsuen, Hong Kong, marked another milestone in promoting veterinary medicine, the concept of One Health, safeguarding public health and championing animal welfare. The CityUHK Farm is equipped with state-of-the-art technologies and facilities and is operating in a sustainable and environmentally friendly way.

CityUHK continues to demonstrate its commitment to the local community by participating in the Lam Tsuen Well-Wishing Night Market. CityUHK's booth at the night market offered free milk cartons and introduced the original flavour of its newly launched ice cream. The milk and ice cream are the by-products of CityUHK Farm.

3 GOOD HEALTH AND WELL-BEING



ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

TEACHING AND LEARNING

In 2023/24, CityUHK offered 9 courses relevant to SDG 3. Our students explore the role nutrition plays in preventing disease, maintaining physical and mental wellness, and keeping young and vibrant through our “Nutrition and Wellness” course in the Department of Biomedical Engineering. Students are encouraged to think outside the box by interlinking nutrition and wellness problems with their backgrounds in social science, business, arts, law and technology. They gain knowledge in healthcare regimes and fine-tune their critical thinking on ethical issues related to food safety, regulation and environmental pollution.

Topics on recent advances closely related to healthcare and wellness feature in the Department of Biomedical Engineering course “Engineering Your Health,” which applies basic science and engineering knowledge to improve quality of life through efficient disease detection, prevention and treatment. The primary objective is to help students understand the human body and healthcare issues that are closely related to basic concepts and tools of science and engineering.



CityUHK students de-stress with registered therapy dogs through “Professor Paws”, which have visited hospitals and residential care homes for seniors in the past in the capacity of “Doctor Dogs”.

RESEARCH

We published 2,151 research papers related to SDG 3 between 2019 and 2023.

The longitudinal study “Social participation, loneliness and well-being among older adults in Hong Kong” in the Department of Social and Behavioural Sciences examined the relationship between loneliness, social participation, life satisfaction and social networks among older adults in Hong Kong as well as the mediating effects of social networks and social participation. The research found that loneliness as a predictor of life satisfaction, sequentially mediated by network importance and social participation, was significant and explained a total of 21% of the variance in life satisfaction.

We have also investigated the relationships between specific types of social participation and well-being variables (i.e., life satisfaction, positive affect, negative affect, symptoms of depression and anxiety) in older Chinese adults in Hong Kong in research titled “Associations among Social Participation Types, Mental and Subjective Well-being in Chinese Older Adults during the COVID-19 Pandemic” in the Department of Social and Behavioural Sciences.

2,151



research papers
(2019–2023)



The Exercise is Medicine On-Campus ceremony encouraged staff and students to challenge themselves.

ON-GOING INITIATIVES

Wellness and safety

Key initiatives in the [“Healthy U” programme](#) for the CityUHK community include [“Wellness For All”](#), an ongoing campaign that enhances physical wellness and a healthy lifestyle through programmes like the Annual Athletic Meet, Walk, Fitness Walking and Chinese Medicine Talk.

- Our Safety Policy supports a healthy environment for the CityUHK community
- The [University Charter of Social Responsibility](#) covers ethics, students, employees, community, environment and health and safety.
- The [Staff Social Club](#) has promoted staff well-being and welfare.
- The [“De-stress with Professor Paws” Visits](#) give students time to hang out with amazing therapy dogs, who are always keen to be petted.
- We won the “Safety Performance Award – Outstanding” in the 19th Hong Kong Occupational Safety and Health Award,” which was organised by the Occupational Safety and Health Council. The award recognises our safe and contemporary facilities plus excellent safety audit results, safety management systems, and our work-related accident record, among others.

Healthy life

- Plant-based/veggie menus on campus
- Regular healthy eating talks/seminars
- Exhibitions on healthy eating
- Low-carbon lifestyles, diets and fitness regimes through Annual Green Living @ CityU

Occupational Health

- Laser eyesight tests required for use of Class 3B and Class 4 lasers
- Annual health checks for staff working with radioactive materials or irradiating apparatus
- Immunisation for staff working with animals
- Radiation exposure monitoring
- Indoor Air Quality Certification Scheme
- Exposure assessments on gases, dust, noise, formaldehyde, volatile organic compounds, etc.

Exercise is Medicine on Campus - 2024 Gold Campus

CityUHK earned Gold-level recognition from the Exercise is Medicine® On Campus Committee (EIM-OC) in 2024. This award recognises our commitment to creating a culture of wellness on campus and physical activity, linking up with healthcare and fitness professionals and providing a referral system for exercise prescriptions. EIM-OC, launched by the American College of Sports Medicine, encourages faculty, staff and students to work together towards improving health and well-being.

CityUHK is one of only 145 universities and colleges around the world to be honoured by EIM-OC. This is our fifth consecutive year earning Gold-level recognition.

4 QUALITY EDUCATION



ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

TEACHING AND LEARNING

In 2023/24, CityUHK offered 67 courses that promote lifelong learning.

Working for Quality Education

We are committed to building a “quality culture” and contributing to plans and activities to improve education, especially in the area of sustainability. Our emphasis on a culture of quality ensures that our students receive the best possible innovative education.

Our [Massive Open Online Courses \(MOOC\)](#) comprehensively cover innovation/entrepreneurship, creative media, and local culture/heritage, aiming to reach out to students and academics locally, regionally and further afield.

CityUHK has joined hands with FutureLearn, one of the world’s largest MOOC platforms, to deliver courses from the best universities and cultural institutions. To further strengthen our position as a global destination for professional education, CityUHK has expanded its MOOC partnership with CNMOOC, a cooperative alliance of Chinese universities offering open online courses, and XuetangX, a similar kind of platform, to provide high-quality courses for Chinese learners.

[Expert Talks for Secondary School Students](#)

To help broaden the knowledge of the younger generation in the fields of energy and environment, professors from our School of Energy and Environment deliver a number of talks each year to local secondary school students either on the CityUHK campus in Kowloon Tong or at schools.

Sharing of Good Practices

The BOLD Forum delivered by notable CityUHK professors as a way of sharing ideas, research and personal experience aims to inspire secondary school students in planning their future pathways. Talks have covered “Sustainable Cities through Energy and Environmental Innovations” and “Data-driven Management of Societal Health,” among others.



Secondary school students attended the Expert Talks at CityUHK.

200



research papers
(2019–2023)



CityUHK held an Orientation Day for undergraduate freshmen with Special Educational Needs.

RESEARCH

We published 200 research papers related to SDG 4 from 2019 to 2023.

Our researchers apply for funding from the [Quality Education Fund \(QEF\)](#) such as “Application of whole school positive education to prevent mental health problems and enhance the well-being of teachers and students in primary schools” and “On School-sites Virtual Reality-based Training Programme (vPAD-II) for social adaptive and emotional training on children with Autism Spectrum Disorder.”

COMMUNITY ENGAGEMENT

Free access to campus facilities and equipment

[The Indra and Harry Banga Gallery](#) supports the University’s vision to excel in research and professional education through artistic, innovative, technology-rich, and cross-disciplinary exhibitions that engage the community.

ON-GOING INITIATIVES

Students with [Special Educational Needs \(SEN\)](#) achieve academic excellence and pursue their personal development at CityUHK. Our barrier-free learning environment improves the quality of education for everyone, allowing campus life to flourish.

Academic support includes:

- Separate rooms for exams
- Extended time
- Audiobooks assistive technology support
- Computer screen reader
- Speech-to-text software
- Peer support on educational needs (Note-taking services)

Personal development includes:

- Counselling services
- Career counselling
- Activities organised by Inclusion Ambassadors
- Internship programmes



The Indra and Harry Banga Gallery at City University of Hong Kong.

5 GENDER
EQUALITY



ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

TEACHING AND LEARNING

In 2023/24, CityUHK offered 14 courses in relation to gender equality.

“Gender, Culture and Society” in the Department of Public and International Affairs provides students with a basic understanding of the social construction of gender concepts and relationships, encouraging female and male students to explore the sociological, psychological and biological boundaries of the sexes and assisting them in considering how these boundaries affect their everyday lives, inter-personal interactions, and life chances and choices. The course examines gender relationships in a number of societies and highlights the significance of gender equality. It facilitates in-depth discussions on sexual ideologies, feminist concepts and gender politics.

“Gender in Popular Media” in the School of Creative Media explores cutting-edge issues relating to camera eye, spectatorship, gender and sexuality. It introduces theories of gender and spectatorship from psychoanalytic and cultural studies perspectives. The primary texts include all forms of popular media—photographs, films, (music) videos, games, ads, TV commercials, magazines and so on.

“Women and Social Change in Asia” in the Department of Public and International Affairs examines the lives of women in Asia, taking into account social, economic and political change. The course uncovers different aspects of gender politics of women’s and social movements, the state, civil society actors, and specifically the role of development NGOs and donors, in an attempt to bring about social change. It draws on concepts and theories from gender studies, development studies, and political sociology. Readings include women’s own life stories, novels, as well as academic journals and books.

Other related courses cover gender, crime and human trafficking; sexuality, culture and diversity; gender and development; and gender perspectives on Chinese literature.

At CityUHK

**EMPOWERING
WOMEN**

38%

women in leadership/
managerial roles



CityUHK brought together female faculty members and students to join the global celebration of International Day of Women and Girls in Science.

RESEARCH

We published 117 research papers related to SDG 5 from 2019 to 2023.

[The Routledge Handbook of Chinese Gender & Sexuality](#) co-written by the School of Creative Media surveys topics concerning historical, modern and contemporary Chinese genders and sexualities and explores gender and sexuality as key dimensions of China's modernisation and globalisation, situating Chinese gender and sexuality in transnational and transcultural contexts.

ON-GOING INITIATIVES

[The Committee Against Sexual Harassment \(CASH\)](#) promotes gender equality and raises colleagues' and students' awareness of sexual harassment policies and procedures.

International Day of Women and Girls in Science

CityUHK published an advertorial in *The Guardian* newspaper in the UK in February 2024 celebrating the International Day of Women and Girls in Science, highlighting our commitment to eradicating gender bias, removing barriers and promoting inclusivity.

6 CLEAN WATER AND SANITATION



ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

TEACHING AND LEARNING

In 2023/24, CityUHK offered 7 courses related to clean water and sanitation.

The course “Urban Green City: Pollution and Solution” in the School of Energy and Environment enables students to develop a broader perspective and critical understanding of current pollution issues related to urban environments, as well as to identify possible solutions to these environmental problems based on sound scientific understanding. It covers environmental health and toxicology, food

safety and security, air pollution and health effects, climate change, water pollution and resource utilisation, wastewater treatment and management, integrated solid waste management, and future sustainable development/ environmental ethics.

531



research papers
(2019–2023)

RESEARCH

We published 531 research papers related to SDG 6 from 2019 to 2023.

A project titled “[Enhancing membrane distillation’s potential for water reuse and zero liquid discharge: An energy-efficient and hypersaline-stable membrane](#)” focused on a special membrane that imparts efficient localised photothermal effect and strong water repellence, achieving sustainable freshwater production.

A project titled “Using novel nanobubble water treatment technology to reduce the use of antibiotics in aquaculture” aimed to determine whether different concentrations of air, oxygen, and ozone nanobubbles with and without a forward osmosis membrane process can significantly reduce the level of oxytetracycline hydrochloride, one of the most commonly used drugs in the aquaculture industry, in both fresh water and saltwater under laboratory conditions.



ON-GOING INITIATIVES

The interdisciplinary [Water and Membrane Technologies Laboratory](#) emphasises the development of emerging membrane technologies and innovative approaches to solving pressing water quality and quantity issues. New projects include seawater desalination using membrane technology, membrane-based technologies for removing emerging pollutants, and membrane fabrication.

In addition to supplying free drinking water on campus, our [Grey Water Recycling System](#) collects, filters and disinfects wastewater from wash basins, condensate water from air-handling and fan coil units in offices, and discharged water from equipment cooling in laboratories for irrigation.

COMMUNITY ENGAGEMENT

The Student Chapter at the School of Energy and Environment partnered with the Hong Kong Cleanup for a beach clean event, a green activity that makes contribution towards the preservation of Hong Kong's marine environment and raises awareness on the importance of protecting our environment and natural resources.



The Student Chapter at the School of Energy and Environment partnered with the Hong Kong Cleanup for a beach clean event.

7 AFFORDABLE AND CLEAN ENERGY



ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

TEACHING AND LEARNING

In 2023/24, CityUHK offered 20 courses related to SDG 7.

[The School of Energy and Environment \(SEE\)](#) is the first dedicated school of its kind in Hong Kong, established in July 2009. SEE fosters an interdisciplinary approach to developing sustainable energy and environmental technologies. Programmes include two bachelor's degrees, the BEng in Energy Science and Engineering and the BEng in Environmental Science and Engineering, plus an MSc in Energy and Environment and a rigorous PhD programme.



An international research team led by Professor Zhang Hua has successfully developed a highly efficient electrocatalyst that can enhance hydrogen generation through electrocatalytic water splitting.

RESEARCH

We published 2,969 research papers related to SDG 7 between 2019 and 2023.

Our researchers have converted temperature fluctuations into clean energy with novel nanoparticles and heating strategies and major breakthroughs in developing highly efficient electrocatalysts for clean energy. Approaches include [new additives for perovskite solar cell technology](#) and a [hydrogen generation study](#) published in *Nature* with international collaboration.

Our [Hong Kong Institute for Clean Energy \(HKICE\)](#) advances energy-related technologies and fosters new connections between exciting energy research areas across borders and sectors. It pursues highly interdisciplinary and collaborative initiatives to drive innovative clean energy solutions for tackling challenges to global net-zero carbon emissions. Our determination and vision manifested in HKICE's plan are grounded on six pillars: energy generation, energy storage, energy-saving, energy distribution, smart city, and energy analysis and policy.

2,969



research papers
(2019–2023)



An international research team co-led by CityUHK is accelerating the commercialisation of perovskite photovoltaic technology with a new approach that boosts the efficiency of inverted perovskite solar cells (PSCs) to a record high of 25%.

ON-GOING INITIATIVES

Renewable Energy

CityUHK and CLPe have teamed up to install advanced high-efficiency bifacial solar panels across the campus as a one-stop Solar-as-a-Service solution provided by CLPe, which promotes the adoption of renewable energy in the University in the most cost-effective way.

CLPe will install nearly 2,000 high-efficiency bifacial solar panels on approximately 4,500 square metres of rooftop space on 30 buildings on the CityUHK campus. The panels absorb sunlight on both sides and generate around 10% more electricity than traditional single-sided panels. The system is expected to generate approximately 1.15GWh of electricity per year, equivalent to the annual electricity consumption of around 280 households, and will reduce carbon emissions by an estimated 450 tonnes a year.

Energy Saving

Traditional fluorescent tubes have been replaced with dimmable LED light tubes and traditional light fittings have been replaced with LED panel lights in targeted zones within the campus. Fifty solar lights have been installed in outdoor areas.

Overall energy efficiency on campus has been significantly enhanced by:

- substituting air chillers with water chillers
- using thermal energy storage to adjust energy use at peak- and off-peak hours
- setting up renewable energy systems such as photovoltaic panel systems and solar landscape
- charging stations for electric vehicles

- installing LED lamps, daylight sensors, and motion sensors
- joining forces with the Hong Kong community to save energy

Energy Efficiency

We are signed up to the “Energy-Saving Charter 2023”, co-launched by the Environment Bureau and the Electrical and Mechanical Services Department, HKSAR Government. By signing the Charter, we underline our commitment to switching off electrical appliances and systems when not in use and procuring energy efficient electrical appliances and systems.



CLPe has partnered with CityUHK to install a solar power system across campus.



Professor Steven Wang (right) and Lo Wai-kin, a CityUHK PhD student, are pictured with their powerful nanogenerator with ultrahigh power density.

COMMUNITY ENGAGEMENT

Clean Energy for Carbon Neutrality

A major international conference on [Clean Energy for Carbon Neutrality](#) at CityUHK in March 2023 held in partnership with the French Academy of Sciences and CityUHK's Hong Kong Institute for Advanced Study shared research and promoted sustainable practices.

[Hong Kong Institute for Clean Energy](#)

We were given a significant boost when the Financial Secretary of the HKSAR appointed CityUHK's HKICE Director to the Green Technology and Finance Development Committee in June 2023.

Transforming Clean Energy with Printable Organic and Perovskite Solar Cells

We participated in the 40th anniversary celebrations of the MOE Key Laboratory of Functional Polymer Materials at Nankai University with a talk titled "Printable Organic and Perovskite Solar Cells for Clean Energy" delivered by Professor Alex Jen, Director of Hong Kong Institute for Clean Energy. His talk acted as a catalyst, instilling fresh perspectives and reigniting enthusiasm for sustainable energy solutions among all attendees.

CityU STEM Carnival cum Student Project Exhibition

A fascinating range of student and staff research projects that have direct applications to daily life was showcased at the STEM Carnival cum Student Project Exhibition 2023 held by the College of Engineering Bright Future Engineering Talent Hub in July 2023. Over 700 secondary school students experienced at STEM activities at several workshops facilitated by CityUHK teachers. The aim was to inspire participants and enhance their problem-solving skills in the spirit of CityUHK's focus on STEM education.

Energy Management

50



solar lamps
installed on campus

2,000

solar panels
to be installed by
end of 2024

15.4%

reduction of greenhouse
gas emissions
(per floor area) compared
with baseline year

30% -
50%

reduction of energy loss
from low-emissivity glass
walls

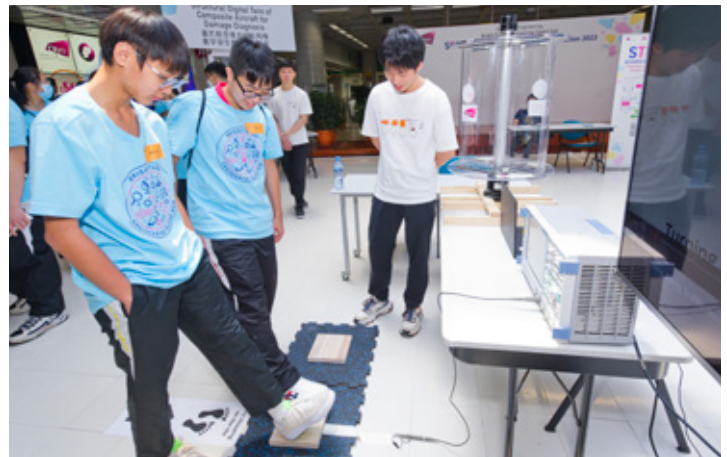


Low-emissivity glass walls can reduce energy loss by 30% to 50%.

One of the featured projects was a first for Hong Kong: [the Powerful Nanogenerator with Ultrahigh Power Density](#), led by Professor Steven Wang from the Department of Mechanical Engineering and the School of Energy and Environment. This invention has set a record for the high-power output of similar nanogenerators as it can generate over 1,000 volts of electricity.

In response to global warming and increasing energy demand, the CityUHK research team has designed a small and easy-to-install wind turbine for highways and tunnels. Given Hong Kong's busy traffic situation, the device can exploit the wind flow caused by moving vehicles while the fan blades of the wind turbine can be adjusted to match any changes in wind behaviour.

The device can be applied in daily life, too. It can be installed on the floor in schools or shopping malls or on roads. The pressure generated when people walk on the floor or when vehicles drive on the road can be used to generate power.



Secondary school students try out the powerful nanogenerator at CityUHK's STEM exhibition in July 2023.

8 DECENT WORK AND ECONOMIC GROWTH



PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

TEACHING AND LEARNING

In 2023/24, CityUHK offered 41 courses related to sustainable economic development.

The fundamental roles of capital markets in facilitating sustainable economic growth, with a focus on raising capital and corporate restructuring, are featured in the course “Corporate Merger and Acquisition with Applications in the Fintech Industry” in the Department of Economics and

Finance. Students acquire a thorough understanding of the economic, financial and strategic fundamentals of mergers and acquisitions, especially those in the Fintech industry. The course “IPO, and Mergers and Acquisitions” in the College of Business stresses the fundamental roles of the capital markets in facilitating sustainable economic growth, with a focus on raising capital and corporate restructuring.

RESEARCH

We published 476 research papers related to SDG 8 from 2019 to 2023.

One Belt, One Road

[The Research Centre on One-Belt-One Road](#) based in the College of Business enhances CityUHK’s research strength and agenda in conducting high-impact interdisciplinary research on the “One-Belt-One-Road” linking China with Europe through Central and Western Asia, and the 21st Century Maritime Silk Road, connecting China with Southeast Asian countries, Africa, and Europe.

Aspiring to support the national policy, the Centre draws on research strengths from the expertise of all six member departments in the College of Business. Such synchronised collaboration in research ensures the fruitful and promising development and outputs of various state-of-the-art research studies relating to the economic development of China and the regions along the Belt and Road.

Public Transport Logistics

CityUHK, together with Tsinghua University and in agreement with the United Nations Economic Commission for Europe, established the [International PPP Specialist Centre of Excellence for Public Transport Logistics](#).

Sustainable Hong Kong

[The Research Centre for Sustainable Hong Kong \(CSHK\)](#), a self-financing centre established in June 2017, is an Applied Strategic Development Centre at CityUHK. It houses the [Sustainable Hong Kong Research Hub](#) and the [CSHK International Hub for the Belt and Road](#) and supports all the research and collaborative activities with stakeholders from different sectors and regions. CSHK analyses and develops solutions to meet critical sustainability issues in Hong Kong from a multi-disciplinary perspective.



The CityUHK Employers' Luncheon is an important platform for networking and interaction with industry.

ON-GOING INITIATIVES

Career Leadership Centre (CLC)

CLC helps students realise their career goals, explore career options and gain skills for the global workforce after graduation through consultation services, career preparation workshops and employability enhancement programmes.

We set up local and overseas internships as well as graduate opportunities by working closely with our employer partners. Our employer engagement events, such as the CityUHK career fair and other annual networking activities, create more opportunities for our students to meet potential employers' needs.

CityU JobPlus

The job information system CityU JobPlus supplies students with updated information on job details and application processes. The system typically offers more than 1,000 jobs with an update of 100 new posts every day in more than 24 fields and industries.

Occupational Health and Safety

CityUHK promotes high standards for activities conducted in its buildings and facilities as an integral part of management, complying with all relevant government ordinances and regulations concerned with safety and health. Thus ergonomics and industrial hygiene are included in the scope of the University's safety programme.

476 

research papers
(2019–2023)

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

TEACHING AND LEARNING

In 2023/24, CityUHK offered 43 courses related to SDG 9.

CityU Academy of Innovation

The [CityU Academy of Innovation](#) maintains our leading position in innovation education and talent development. Its innovative academic programmes at PhD, Master of Science and undergraduate levels focus on deep-tech venture creation for developing a leading international ecosystem. The aim is to nurture young entrepreneurs, incubate deep-tech start-ups and promote university-industry collaboration.

RESEARCH

We published 996 research papers related to SDG 9 from 2019 to 2023.

As of March 2024, CityUHK had applied for more than 1,580 patents for technologies, 765 of which have been granted, spanning a range of fields, including electricity, chemistry, materials and physics. CityUHK solidified its position as a leading hub for research and innovation in Hong Kong by topping local institutions for the 8th consecutive year in the prestigious Top 100 Worldwide Universities Granted US Utility Patents. CityUHK secured 44th position in 2023, demonstrating its commitment to research that has a scientific, technological or social impact.



The CityU Academy of Innovation has been established for innovation education and talent development.

996



research papers
(2019–2023)



The "Audio Furniture" with an acoustic sound system developed by a HKTech 300-funded start-up called InvisibleTech attracted significant interest from Best Buy, the largest US electronics retailer, during the CES 2024, the world's largest consumer electronics trade fair. (Photo source: InvisibleTech)

ON-GOING INITIATIVES

HK Tech 300

Our flagship innovation and entrepreneurship programme helps aspiring entrepreneurs among CityUHK students, alumni, research staff and others ignite their entrepreneurship journey. The programme aims to create 300 start-ups in three years, providing educational and growth opportunities and translating CityUHK research results and intellectual properties into practical applications. So far:

- More than 1,700 students, staff, alumni and other participants have attended our entrepreneurship training programmes
- More than 710 project teams have been awarded a HK\$100,000 Seed Fund
- Over 140 start-ups have been awarded a HK\$1 million Angel Fund
- A co-investment platform with an initial sum of HK\$100 million was formed with China Resources Enterprise to nurture high-potential start-ups
- More than 180 experienced industrialists and successful entrepreneurs have served as mentors
- Over 90 strategic partners and supporting organisations from CityU Eminence Society, CityU Convocation, major chambers, incubators, institutions, venture capitalists, and industry associations have offered professional services and business opportunities
- More than 16% of the HK Tech 300 projects have been founded by non-CityUHK entrepreneurs with CityUHK's IP

COMMUNITY ENGAGEMENT

Innovations and Inventions Events

We won 24 awards at the [3rd Asia Exhibition of Innovations & Inventions Hong Kong \(AEII\)](#), including one Special Prize IFIA Award, two Gold with Congratulations of Jury Awards, and five Gold, 14 Silver and two Bronze medals, the highest number among local universities.

We regularly showcase our impressive achievements in research, innovation and entrepreneurship at innovation and technology events in Hong Kong that explore new innovation and technology areas with industry, thereby fostering an innovative entrepreneurship culture in the community.

InnoTech Expo is a platform for unveiling the latest breakthroughs in innovation and technology from mainland China and Hong Kong through themed exhibitions, scientific forums and science workshops in late 2022. Altogether 25 outstanding and representative projects were showcased including 11 CityUHK projects in the "Communication and Automation" and "Material Sciences and Microelectronics" areas.

BIOHK attracts biotechnology professionals from around the globe to explore business opportunities through exhibitions, keynote addresses, roundtable discussions and networking with a focus on state-of-the-art biotech innovations. Representatives from HK Tech 300's biotech and health technology start-ups attended BIOHK in late 2022 to promote the University's research capabilities.

10 REDUCED
INEQUALITIES



REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

TEACHING AND LEARNING

In 2023/24, CityUHK offered 42 courses related to SDG 10.

Our students discover sexual biases, discrimination and inequality in their own surroundings and elsewhere in the “Gender, Culture and Society” course in the Department of Public and International Affairs. The course guides students to be self-reflective on gender relations and develop awareness and skills that can create more equality between women and men.

RESEARCH

We published 333 research papers related to SDG 10 from 2019 to 2023.

Workplace sexual harassment (WSH) is recognised as a serious problem with the global #MeToo movement fostering local awareness since 2017. Guided by gender empowerment theory, a study titled “[Perception of Gender Equality Matters: Targets’ Responses to Workplace Sexual Harassment in Chinese Metropolises](#)” co-led by the Department of Social and Behavioural Sciences investigated the relationships between women’s responses as targets of WSH (e.g., choosing avoidance or confrontation) and both their perceptions of gender equality and their knowledge of the relevant national laws. The researchers concluded that institutions need to promote education on gender equality, foster awareness of the laws and regulations relevant to WSH, and cultivate an appropriate organisational culture and environment.

333 

research papers
(2019–2023)



Two students from CityUHK participated the United Nations Commission on the Status of Women (UN CSW68).

ON-GOING INITIATIVES

Policy Statement on Equal Opportunities

We are committed to the principle and practice of non-discrimination in the fulfilment of our dual responsibilities as an employer and provider of higher education. We advocate that talent, skills, intelligence, ambition and potential are found in people irrespective of race and national origin, sex and gender identity, sexual orientation, abilities and disabilities, age, religion and family status.

We provide equal access, consideration, encouragement and support in all areas of student and staff recruitment and management. Decisions are made on the basis of merits measured against criteria which are directly related to the work/study place. These criteria are objective and can be readily assessed, including qualifications, knowledge and skills, experience and personal qualities.

Inclusive Policies

We firmly believe in equality of opportunity and a proactive and inclusive approach that supports and encourages all under-represented groups, promotes an inclusive culture and values diversity, underlining our commitment to equality, diversity and inclusion.

Students with Special Educational Needs (SEN)

SEN students have equal rights in society, especially in a barrier-free learning environment. CityUHK offers accessible facilities, including:

- Wheelchair access
- Accessible washrooms

- Tactile markings on the ground
- Lifts with braille and tactile markings with voice announcement
- Accessible furniture
- Automatic doors

Diversity, Equity and Inclusion Committee

The Jockey Club College of Veterinary Medicine and Life Sciences (JCC) promotes Diversity, Equity and Inclusion (DEI). To this end, the JCC DEI Committee assists in encouraging a better understanding of DEI, providing support and opportunities to all under-represented groups and leading improvements in DEI across all undergraduate and postgraduate JCC programmes.

Advocate for Women's Empowerment at UN CSW68

Two female students showcased CityUHK's dedication to promoting gender equality during their presentation at the 68th session of the United Nations Commission on the Status of Women (UN CSW68) in New York, in 2024, addressing problems faced by women globally such as inequality, violence and discrimination.



MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

TEACHING AND LEARNING

In 2023/24, CityUHK offered 47 courses related to sustainable cities.

The course “Urban Development and Sustainable Cities” in the Department of Public and International Affairs provides students with an understanding of the role, activity and impact of urban planning and the role and consequences of planning for urban sustainability.

The course “Smart Government and Sustainable Cities” in the Department of Public and International Affairs helps students to discover, examine and explain the potential benefits and limitations of managing and delivering public services within an environment characterised by increasingly sophisticated information, communication and technology.

The course “Design of Smart Cities and Sustainable Building” in the School of Energy and Environment focuses on the knowledge and principles needed for the successful design of sustainable and energy-efficient buildings and smart and sustainable cities, introducing environmental design and engineering principles applied to the built environment.

RESEARCH

We published 844 research papers related to SDG 11 from 2019 to 2023.

This paper “[Achieving resilience through smart cities? Evidence from China](#)” analyses four aspects of urban resilience: economic resilience, social resilience, ecological resilience, and infrastructure resilience. The findings show that the development of smart cities can improve social resilience considerably without any obvious effect on economic and ecological resilience and even negatively affect infrastructure resilience. The paper also provides policy suggestions to promote the simultaneous improvement of smart cities and urban resilience, and hence helps establish a new ‘urban resilience’ model.



Modular Integrated Construction (MiC), i.e. using free-standing integrated modules manufactured in the factory and then transported to a building site, was used extensively in our Student Hostel project at Whitehead, Ma On Shan, in Hong Kong.



CityUHK promotes the preservation of intangible cultural heritage by organising traditional art shows.

ON-GOING INITIATIVES

Cultural Heritage

The coordinating unit [Preserving and Appraising Traditional Cultural Heritage \(PATCH\)](#) seeks to preserve traditional cultural heritage in partnership with academic departments and external communities. PATCH offers institutional support for student research projects, field studies, and internships in the area of traditional cultural heritage; organises seminars/conferences/exhibitions that promote cross-border mutual understanding of cultural heritage; and works with the global community to preserve and publish rare heritage research documentations.

Carbon Wallet

Students are encouraged to record their daily green actions (recycling, taking the MTR, walking, green shopping, etc.) and earn Carbon Wallet Points for redeeming green rewards. We aim to inspire everyone to embrace a green lifestyle by rewarding environmentally friendly actions.

[Modular Integrated Construction \(MiC\) for New Buildings](#)

The construction of our new student hostel at Whitehead in the New Territories employs MiC technology, which involves the fabrication of modules in a controlled factory environment. MiC offers better quality control, higher productivity, and improved cost-effectiveness. The on-site installation method can reduce waste and dust, leading to improved environmental performance.

COMMUNITY ENGAGEMENT

We invited the Hong Kong Green Building Council to offer insights and experiences into current practices and emerging trends in green building and design, including the benefits of MiC construction technology.

Our [Cultural Exchange Oasis](#) fosters an inclusive environment on campus and beyond through a diverse range of multicultural exchange projects to cultivate greater awareness of heritage and respect for others. The Jiangsu Performing Arts Group Kunqu Troupe, renowned for preserving traditional art forms, performed ten operatic excerpts at CityUHK.

844 

research papers
(2019–2023)



ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

TEACHING AND LEARNING

In 2023/24, CityUHK offered 29 courses related to SDG 12.

The course “Environmental Control and Waste Treatment” offered by the Department of Chemistry enables students to develop knowledge of various modern approaches and philosophies in integrated waste management and investigate techniques and methodologies in integrated waste management.

RESEARCH

We published 536 research papers related to SDG 12 between 2019 and 2023.

Increasing consumption in developing countries poses a significant challenge to mitigating climate change. Understanding household characteristics is essential in exploring potential strategies for decoupling carbon emissions from increasing consumption. In the study [“Changes in the socio-economic characteristics of households can decouple carbon emissions and consumption growth in China,”](#) CityUHK researchers found that changes in household consumption structure and carbon intensity among households with improved economic levels, could result in a reduction of carbon emissions by 14 to 19%. They identified three potential pathways to achieve decoupling: household economic upgrading, transitioning to low-carbon household characteristics, and reducing material consumption.

ON-GOING INITIATIVES

[Disposal/Replacement/Acquisition of Furniture and Equipment](#)

We adhere to a strict set of principles for reducing, reusing, recycling, and replacing furniture and equipment as set out in the University’s Charter of Social Responsibility.

[Environmental Policy](#)

We follow principles of sustainability and the continual improvement of environmental performance that include the necessity to:

- Promote schemes for the collection of materials appropriate for recycling;
- Seek alternative ways of disposing of and reducing waste in environmentally acceptable ways;
- Re-use materials wherever practicable;
- Consider the environmental-friendliness of any item to be purchased;
- Distribute information in the most environmentally friendly manner possible and move towards a paperless office as far as possible;
- Maintain all existing plants and equipment to a high standard in order to maximise efficiency and reduce unnecessary energy consumption;
- Make provisions and improvements to the built environment to facilitate the reduction of waste generation and water and energy consumption;
- Raise awareness among staff and students of the need for energy conservation, waste reduction, re-using and recycling through education, training and promotional campaigns; and
- Co-operate with the government and agencies to address environmental issues in general and improve the environment of the University, in particular.



Convenient Lunchbox Lending Programme reduces disposable waste and promotes sustainability.

Food Waste

CityUHK launched a “Zero Food Waste” campaign to encourage the University community to be more sensitive about food waste issues and to contribute to more sustainable ways of living. Our campaign, the first of its kind among local tertiary institutions, was sponsored by the Environment and Conversation Fund. Other programmes to minimise food waste include:

- Food Waste Recycling Trolleys: Any food waste generated at CityUHK catering outlets is converted into fish feed while food waste from staff residential quarters is used as fertiliser for landscaping on campus.
- “Less Rice, One Dollar Less”: We reduce food waste by ordering a smaller rice portion in the canteens and getting a reduction of one dollar.

Smart Recycling

In collaboration with the Environmental Protection Department and the HKSAR Government, two sets of smart recycling bins have been installed on campus and at the Student Residence. Promotional sessions were conducted at both locations in May 2023. Staff and students earn points through the GREEN\$ Mobile App when submitting recyclables.

To let the CityUHK community get a glimpse of the Smart Recycling System, a Smart Recycling Promotion Vehicle (SRPV) toured the University in June 2023. The SRPV is equipped with 4 units of smart recycling bins, a smart balance and a gift redemption unit.

Lunch Boxes

The Lunchbox Lending Programme, a key initiative under the umbrella of the Jockey Club Sustainable Campus Consumer Programme, aims to drive sustainability and promote SDG 12: Responsible Consumption and Production in the eight campus communities.

Green Living @ CityU

Activities organised in 2023:

- “Lai See” – also known as red packets, Reuse and Recycle, reusing red packets for special occasions
- Books Give and Take – from May to September 2023
- Mooncake Collection & Donation
- Metal Mooncake Container Collection
- Clothing Swap Pop-up Market
- Umbrella Bags Reduction Accreditation Program 2023 – Diamond Level

Waste Management

103 tonnes of solid waste recycled

47.7 tonnes of food waste recycled

5,740 m³ greywater recycled

1.2 million plastic straws saved

over 140 different types of batteries collected for recycling

over 2,300 staff and students joined WasteSmart MoneySmart Pledge in “buy and use what I need, not what I want” and “recycle the recyclables”



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

TEACHING AND LEARNING

In 2023/24, CityUHK offered 18 courses related to SDG 13.

The course “Climate Change and Extreme Weather” in the School of Energy and Environment provides students with an understanding of contemporary climate issues, broadens their knowledge of the myths and facts about global warming, and raises awareness about extreme weather. The course covers such issues as weather and climate and their effects on our lives, the history of climate change, rising sea levels and our future, ENSO events and climate disasters, tropical cyclone warnings, and responses to climate change.

The course “Climate Change and Adaptation Strategies” in the School of Energy and Environment develops a fundamental appreciation and understanding of climate change and adaptations to climate change issues. The course covers meteorological and geological topics including Earth’s climate system, weathering and soils, groundwater and wetlands, oceans and coastlines, among others.

The course “Climate Change: Science, Adaptation and Mitigation” in the School of Energy and Environment covers the basic physical science related to different components of the Earth system related to weather and climate and studies the science of climate change.

RESEARCH

We published 647 research papers related to SDG 13 between 2019 and 2023.

A research team comprising three CityUHK’s PhD students won the Silver Award and the Best Sustainable Solution Award at the 3rd Chun Wo Innovation Student Awards with their novel [Camel-Fur-Inspired Passive Sorbent Cooler System \(CPSC\)](#). The CPSC system was inspired by the way camels take moisture from the desert air at night and release the stored water during the day for cooling.

647



research papers
(2019–2023)



ON-GOING INITIATIVES

CityUHK's immediate focus is carbon reduction by enhancing the energy efficiency of both new and ongoing buildings. Using the baseline year of 2018/19, we target a reduction of 8% of greenhouse gas emissions per floor area on campus by 2030.

[Low-Carbon and Climate Impact Research Centre \(LCCIC\)](#)

LCCIC integrates the low-carbon precincts in the context of climate impact studies to facilitate comprehensive research coverage in the domain of energy-environmental issues. Tailored research focus is designed to untangle the causes and consequences of carbon and climate change.

[Low Carbon Energy Education Centre](#)

The CLP Power Low Carbon Energy Education Centre is a successful cross-sector collaboration between CityUHK and CLP Power Hong Kong Limited which was set up in October 2017. The Centre puts to best use both sides' expertise, resources and strengths in achieving common goals.

[MoU in materials technology and climate sustainability](#)

An MoU with the National University of Singapore in July 2023 signalled a milestone in promoting joint international research and development activities in materials technology and climate sustainability.

COMMUNITY ENGAGEMENT

[HK Tech Forum](#)

World-renowned experts engaged in an interdisciplinary dialogue on the challenges and prospects of next-generation energy development and applications at the HK Tech Forum on Carbon Neutrality and Sustainable Environment in October 2022. The event was hosted by the Hong Kong Institute for Clean Energy and the Hong Kong Institute for Advanced Study at CityUHK.



CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

TEACHING AND LEARNING

In 2023/24, CityUHK offered 9 courses related to SDG 14.

This course, “Water and Water Resource Engineering” offered by the School of Energy and Environment, introduces the theory and application of physical and chemical processes for the improvement of water quality in engineered water treatment plants and natural aquatic systems.

The course “Water Resources Assessment and Management” offered by the Department of Architecture and Civil Engineering provides the principles essential for water resources assessment and management in urban cities, and the application of these principles to design and develop innovative approaches to address urban water issues.

The course “Piped Services” provides students with fundamental knowledge of system components, working principles, and building considerations for water supply services, sanitation and drainage systems; and enables students to recognise energy-saving principles in water supply services, and drainage systems.

The Department of Architecture and Civil Engineering provides students with an understanding of the supply system, water distribution and water treatment for water supply and an understanding of the wastewater and stormwater system, wastewater treatment and disposal through the course “Water and Wastewater Engineering.”

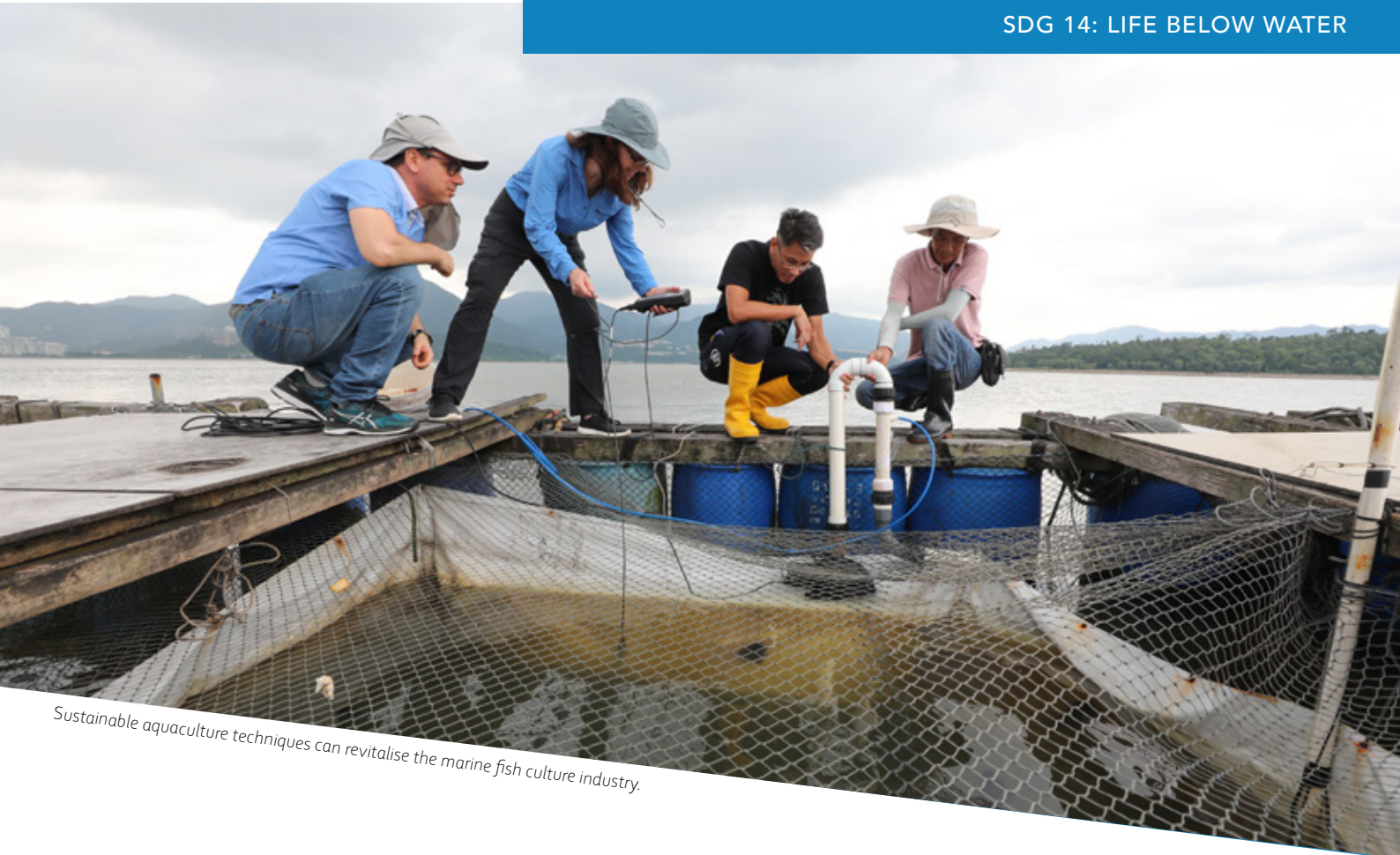
The School of Energy and Environment provides students with the fundamental knowledge of wastewater engineering processes as well as the analytical techniques involved in assessing water quality and an introduction to state-of-the-art processes in wastewater treatment through the course “Wastewater Engineering and Water Quality Assessment.”

The Department of Infectious Diseases and Public Health focuses on aquaculture of food and ornamental fish and the primary health issues facing these industries and covers the main species used for ornamental and food production aquaculture, as well as the husbandry requirements of these species, in the course “Aquaculture and Aquatic Animal Health.”

389



research papers
(2019–2023)



Sustainable aquaculture techniques can revitalise the marine fish culture industry.

RESEARCH

We published 389 research papers related to SDG 14 between 2019 and 2023.

Sustainable aquaculture and marine economy

To protect the marine environment and facilitate the sustainable development of the marine economy in Hong Kong, a CityUHK-led team has developed a new aquaculture technique by establishing a floating, indoor weatherproof fish farm with a seawater recirculating system to replace conventional fish rafts. The promising results, including increased productivity and improved food safety, will contribute to supporting the livelihood of fish farmers and revitalising the local marine culture industry.

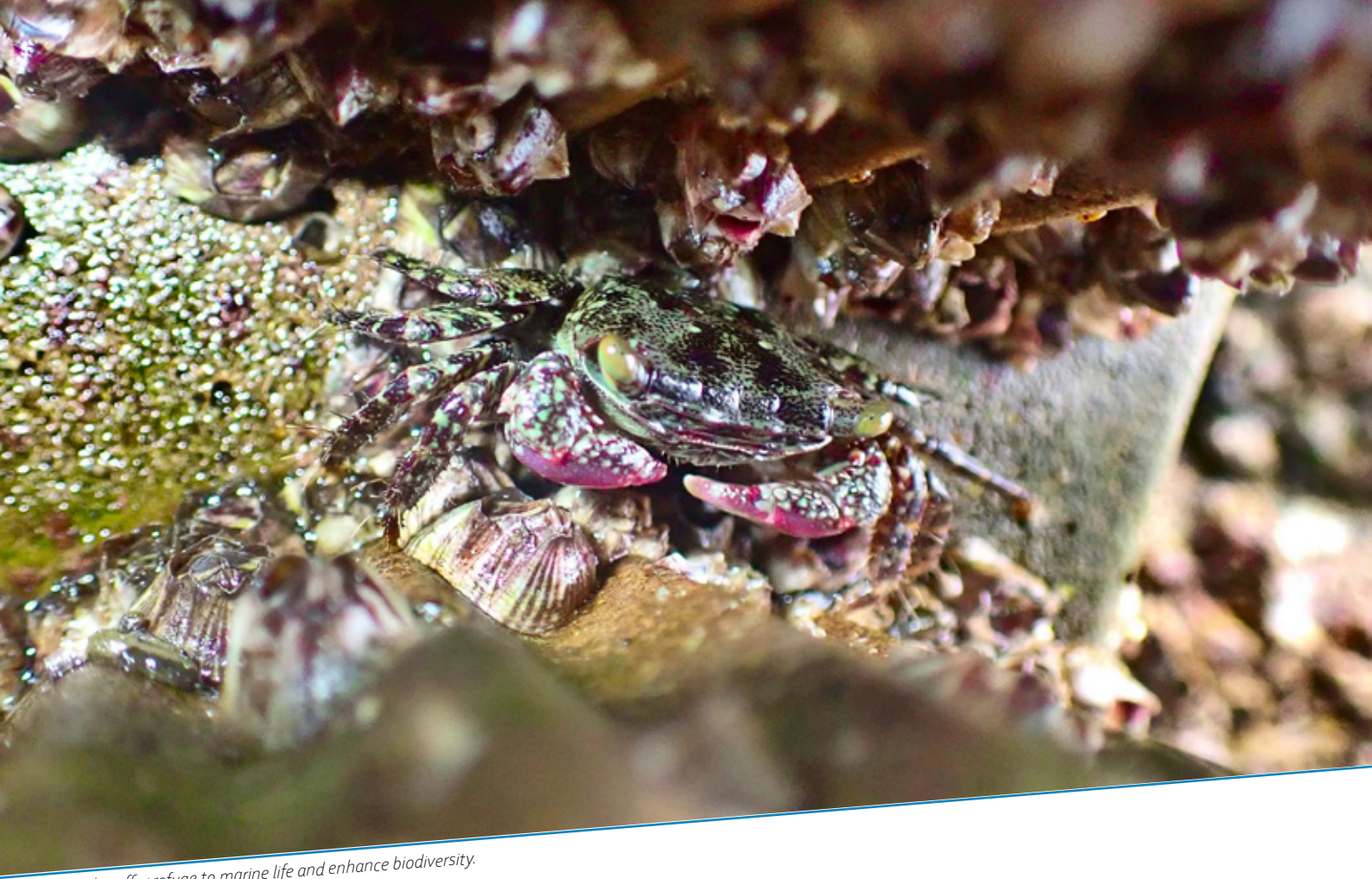
Addressing the threat of red tides

Hong Kong's traditional marine aquaculture industry, which provides about 5% of the local demand for live marine fish, relies on good seawater quality in designated fish culture zones and their surroundings. One main challenge in recent years is the frequency of harmful algal blooms, commonly referred to as "red tides", which cause oxygen depletion in seawater and the death of farmed fish.

Supported by the Sustainable Fisheries Development Fund from the Agriculture, Fisheries and Conservation Department, HKSAR Government, a team from our State Key Laboratory of Marine Pollution has worked on developing better culture techniques for raising the juveniles of fish like the giant grouper with the use of a seawater recirculating system, housed inside a floating fish farm.

Trawl ban boosts marine biodiversity

The prohibition of trawling activities in the Hong Kong marine environment for several years now has significantly improved biodiversity, according to an inter-university study led by CityUHK. The results of this study suggest that the fishing ban has reduced pressure on the marine environment from fishing and has led to substantial increases in the richness of species and the abundance of benthic marine organisms, i.e. those usually at the bottom of a body of water. The average number of benthic species has increased by 335%, while the number of predatory crabs has increased by 600% in eastern waters and a whopping 1,338% in western waters.



Eco-tiles offer refuge to marine life and enhance biodiversity.

ON-GOING INITIATIVES

Hong Kong Green Innovations Awards

CityUHK's State Key Laboratory of Marine Pollution (SKLMP) earned the prestigious Gold Award at the Hong Kong Green Innovations Award as part of the 2022 Hong Kong Awards for Environmental Excellence (HKAEE). This recognition highlights the remarkable achievements of the CityUHK team in the field of green innovation. Organised by the Environmental Campaign Committee, HKSAR Government, HKAEE is renowned as the city's annual "Oscars of Environmental Protection."

The CityUHK team has revolutionised the concept of seawalls with a two-fold innovation. First, they developed an eco-friendly concrete mix, comprising 40% waste materials, including fly ash from incinerated sludge and dredged marine sediment left over from navigation route maintenance. This novel concrete mix has a high compressive strength and low surface pH, which is crucial for sea defence structures and marine larval settlement, respectively. Second, incorporating ecological theory, the team created eco-tiles with water retention capacity and microhabitats, such as grooves, holes and crevices. These features offer refuge for marine life and shade and lower temperatures during low tide in summer.

Aquatic Animal Health Facilities

We secured a series of locations for education and research units for aquatic animal health teaching and research to promote international excellence in the higher education and aquaculture industry:

- Marine Fish Farm at Sai Kung, Tai Tau Chau, Hong Kong
- Gei Wai Nature Reserve at WWF RAMSAR site, Mai Po, Hong Kong
- Grand Aquarium at Ocean Park Hong Kong, Aberdeen, Hong Kong



CityUHK's groundbreaking innovation, "Enhancing Intertidal Marine Biodiversity on Artificial Seawalls by Novel Eco-tiles", has won a number of awards.

COMMUNITY ENGAGEMENT

Strategic Partnerships

WWF Gei Wan collaboration at Mai Po Nature Reserve

Gei wai, which means a pond enclosed by an earthen dyke in Cantonese, is a traditionally managed intertidal shrimp pond. Shrimp farming at 'Gei Wai' is an extensive culture system with multiple water channels running through the pond. However, poor management can cause adverse impacts, including the loss of mangroves and soil, and water salinisation, among other challenges.

In collaboration with WWF, we promote the sustainability of shrimp aquaculture by integrating modern commercial practices with traditional gei wai, including:

- researching the production cycle of gei wai shrimps and fishes and the biodiversity
- conducting water quality checks
- building up a fish health programme
- managing the ecosystem
- introducing proper artificial feeds
- improving husbandry and veterinary care in shrimp aquaculture
- releasing the shrimp fry of native species.

Collaboration with Ocean Park Hong Kong

CityUHK and the educational theme park in Hong Kong Ocean Park are addressing potential collaborative activities by advocating, facilitating and participating in the conservation of wildlife and habitats, with an emphasis on Asia, through research and education collaboration programmes.

Safeguarding fish health in local fisheries

Interest in fish and fish health is growing in Hong Kong because of concerns about food safety. CityUHK is playing a major role in this drive to safeguard the health of aquaculture. The HKSAR Government explicitly noted in its policy address in 2017 that greater support was crucial for developing the local fisheries industries. One notable project along these lines is a two-year research "Improving Fish Health and Production in Hong Kong" in the Department of Infectious Diseases and Public Health. The project, which works towards the long-term development of local aquaculture, has secured HK\$5 million in funding from the Sustainable Fisheries Development Fund under the Agriculture, Fisheries and Conservation Department.



PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, HALT AND REVERSE LAND DEGRADATION, AND HALT BIODIVERSITY LOSS

TEACHING AND LEARNING

In 2023/24, CityUHK offered 9 courses related to SDG 15.

Offered by the Department of Biomedical Sciences, the course “Diversity of Life and Evolution” develops an understanding of the principles and importance of classification, an appreciation of Darwin’s theory of evolution, and examines the diversity of life in the Kingdoms, Plantae and Animalia.

Offered by the Department of Biomedical Sciences, the course “Biology of Populations, Species and Ecosystems” examines biological systems from the level of populations through species to ecosystems and complements the course in cell biology. Topics include the diversity of life, evolution, speciation, taxonomy, domestication, and population ecology with a strong emphasis on free-living populations of wild-type terrestrial vertebrates to complement the “One Health” theme in the programme as a whole.

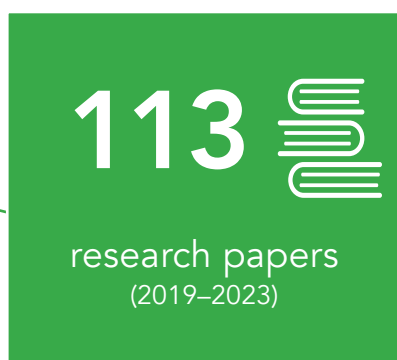
RESEARCH

We published 113 research papers related to SDG 15 from 2019 and 2023.

Buffalo in Lantau Biodiversity Conservation

This project supported by the Lantau Conservation Fund assesses the role of buffalo in Lantau’s biodiversity by taking a behavioural ecology and social sciences approach. The project is led by an interdisciplinary team of researchers and has the two following major objectives:

- Behavioural ecology: Determination of buffalo population size, growth, and vegetation use during dry and wet seasons of the year. Additionally, investigate the social and ranging behaviour of buffalos.
- Social science: Investigation of buffalo-human relations to assess anthropogenic influences on buffalo as agents of conservation. Scientific knowledge generated from the project will not only be instrumental in guiding the conservation efforts of Lantau biodiversity but will advance our understanding of the behavioural and ecological implications of a large mammal in such a unique habitat.





ON-GOING INITIATIVES

Campus Greening

The Chinese Garden, which stretches along Tat Chee Avenue, is an oasis on campus. The garden area together with the Hillside Trail is open to students, staff and the general public for walks and physical exercises.

Tree Inventory and Management System

The Tree Inventory and Management System (TIMS) keeps detailed information on each tree on campus, including its botanical name, size and health condition for green education purposes and public interest.

The first phase of inputting data into the TIMS for 265 trees in the Chinese Garden has been completed. The second phase for the trees at the Nam Shan Chuen entrance and along Nam Shan Chuen Road is in progress.

COMMUNITY ENGAGEMENT

CityUHK participated in the [launch event at AIA Vitality Hub](#), Hong Kong, for the Lantau Conservation Fund that supports projects on feral buffalo of Hong Kong in June 2023.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

TEACHING AND LEARNING

In 2023/24, CityUHK offered 45 courses that promote justice and peaceful societies.

The course “Criminal Justice” in the School of Law provides students with an understanding and appreciation of the main features of the Criminal Justice system in Hong Kong; its mode of operation, the interaction between its principal agents, institutions and practices, and the theoretical foundations underpinning those bodies and processes. This course will not only deal with the mechanical ‘how’ about the manner in which various Criminal Justice practices are conducted, but also with the philosophical and moral ‘why’ it should or should not continue to be conducted in a particular manner.

The course “Citizens and Criminal Justice” in the School of Law deals with and provides an understanding of the basic rights and responsibilities of citizens in Hong Kong and other jurisdictions who are caught up in the criminal justice process and of their criminal justice institutions, such as the police, the courts and the prisons. The course will also provide information on the Hong Kong National Security Law.

The course “Values and Justice in the Contemporary World” in the School of Law examines major issues related to values and justice in the contemporary world. Students are exposed to fundamental concepts such as justice, politics, power, equality, fairness and consequences.

The course “Criminal Justice in Hong Kong and the Pacific” in the Department of Social and Behavioural Sciences provides students with a basic understanding and overview of the main features of the criminal justice system in Hong Kong and the Pacific. This course will also provide students with the opportunity to study fascinating issues of crime and justice that are crucial and closely related to the modern world.

Student Learning Activities

International Internships:

The [Public Law and Human Rights Forum](#) facilitates international internship opportunities for LLB and JD students of the CityUHK’s School of Law. These internship opportunities aim at providing students with exposure to law-related issues as part of the School’s commitment to developing the next generation of lawyers with global perspectives.

Model UN Human Rights Council Universal Periodic Review (MUPR) Competition:

10 LLB and JD students participated in the MUPR Competition in Seoul, South Korea. CPLR collaborated with Human Asia, a South Korean Human Rights NGO, to create this unique opportunity for CityUHK law students. The MUPR aims to encourage participating students to understand human rights challenges and explore sustainable solutions to such challenges in a given country that they represented.

RESEARCH

We published 342 research papers related to SDG 16 between 2019 and 2023.

The aim of the project “[Accommodating the Needs of Persons with Disabilities in Policies Concerning Public Health Emergencies: Law, Ethics and Practice](#)” is to develop

an empirically informed and theoretically supported policy framework for the Hong Kong government to accommodate the needs of persons with disabilities in public health emergencies. The study is divided into three phases and adopts a mixed-method approach, based on qualitative research and policy analysis.

ON-GOING INITIATIVES

Employment and Quality

Through our [Advisory Committee for Graduate Employment](#), students, faculty and staff advise the President, the Council and the Senate, as appropriate, on matters relating to student and graduate employment to promote job opportunities for graduates by maintaining links with the Hong Kong community.

In addition, our [Quality Assurance Committee](#) advises the Senate through the Academic Policy Committee on principles, policies and procedures relating to quality assurance of teaching, learning and assessment and other related matters as requested by the Academic Policy Committee. It conducts audits and other reviews as requested by the Academic Policy Committee and reports on the quality assurance mechanisms and quality of the offerings of the academic units.

Bribery, Academic Freedom, Human Rights

Our basic principles include engaging with different parties to ensure that campus is free from corruption as stated in our staff handbook detailing how to manage issues such as receiving gifts, advantages or discounts.

Our [policy on academic freedom](#) published prominently on the CityUHK home page emphasises the separation of politics and education to ensure CityUHK's academic mission and political neutrality to safeguard campus autonomy.

Our [Public Law and Human Rights Forum](#) is a platform for conducting research, fostering collaboration, and building capacity in the field of public law and human rights. The primary focus is on constitutional law, criminal law and criminal justice, human rights in Hong Kong and Asia, including the subfields of business and human rights, and public international law.

In addition, the [Centre for Chinese and Comparative Law](#) (CCCL) established in 1994 as an interdisciplinary research institute in affiliation with the School of Law is one of the world's oldest research centres on Chinese and comparative legal studies. The Centre's goal is to broaden the horizon of human knowledge and contribute to the betterment of society by conducting research in Chinese and comparative law.



Public Lecture on “Climate Change Governance: Ambitious Targets and Institutional Failures”

The School of Law celebrated its 35th Anniversary in 2022 and held a [public lecture](#) on the above theme delivered by Professor Michael Tsimplis.

The lecture talked about scientists, activists and sceptics who agree that climate change undermines global economic development and poses risks for the populations of developed and developing states too. The United Nations Framework Convention on Climate Change just turned 30 years old and yet the risk of dangerous anthropogenic climate change has not been reduced. The talk considered the reasons why climate change law has been inefficient and discussed whether established institutions could support sustainable development.

International Collaboration

Our School of Law endeavours to develop close links with universities and institutions on the Mainland, in Europe, North America and across the Asia-Pacific region, in the form of staff and student exchanges, joint research, co-sponsorship of conferences and symposia, etc.

[LLM Programme for Chinese Judges](#)

We have worked closely with the National Judges College of the Supreme People's Court of the PRC for the further education of judges from Mainland China.

[Global Legal Education and Awareness Project \(G-LEAP\)](#)

Launched in October 2007, G-LEAP promotes excellence in legal education with a view to providing opportunities for our law students to have a global perspective in the study of law. Under G-LEAP, we signed an agreement with University College, Oxford.



STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALISE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

RESEARCH

Research Partnership for Sustainable Development

Our MoU with the National University of Singapore will promote joint research and development activities in the areas of materials technology and climate sustainability.



Signing of MoU between CityUHK and NUS.

ON-GOING INITIATIVES

Collaborating with Local Universities

The Hong Kong Sustainable Campus Consortium (HKSCC), established in 2010 by the Heads of Universities Committee, serves as a platform for sharing information and best practices on sustainability-related issues. The Consortium implements the Hong Kong Declaration on sustainability and climate change and reports the results of environmental performance indicators adopted by the higher education sector in the HKSAR. Members include academic and non-academic colleagues from the eight publicly funded universities.

Regional NGOs

Our State Key Laboratory of Marine Pollution received approval from the UNESCO Intergovernmental Oceanographic Commission Sub-Commission for the Western Pacific to establish the first UNESCO regional training and research centre on coastal contaminant monitoring and marine innovative technologies in Hong Kong for the Western Pacific region.

Global Estuaries Monitoring (GEM) Programme

The State Key Laboratory of Marine Pollution has also been endorsed by the UN to initiate a ten-year Global Estuaries Monitoring Programme to collect and study environmental pollutants from estuaries in major cities around the globe and then formulate a long-term policy of promoting clean estuaries.

Clean Energy for Carbon Neutrality

The Hong Kong Institute for Clean Energy partnered with the French Academy of Sciences and the Hong Kong Institute for Advanced Study for the International Conference on Clean Energy for Carbon Neutrality in Hong Kong in March 2023. This timely event brought together world-leading scholars in the energy, climate, and sustainable development communities to share thoughts on the latest cutting-edge research for the net-zero mission.



COMMUNITY ENGAGEMENT

Educational Outreach

CityUHK is closely engaged with the local community on a series of services and activities to promote knowledge exchange, deliver an enhanced learning experience and strengthen community ties:

Outreach to Local Schools

We offer a range of school outreach activities, workshops and events for students, teachers, principals and parents.

Exhibitions to the Public

We share knowledge about energy and the environment with the public and promote the arts. The [CLP Power Low Carbon Energy Education Centre](#) and [Indra and Harry Banga Gallery](#) offer the public an inspiring experience of environmental challenges and cross-disciplinary exhibitions on different topics.

Expert Talks for Local Students

Expert talks for secondary school students enrich students' knowledge in different disciplines and give them exposure to disciplines such as FinTech and AI to Climate Change and Clean Energy in a higher education learning and research context.



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