SDG 13

Take urgent action to combat climate change and its impacts

The Education University of Hong Kong is taking urgent and decisive action to combat climate change and its wide-ranging impacts. Recognising our profound responsibility as an institution of higher learning, we are committed to integrating climate action across our operations, research, and educational mission. Our strategy focuses on mitigating our own carbon footprint, enhancing campus resilience, and empowering our community with the knowledge and skills to lead the transition to a low-carbon future.

12 Courses

22 Researchers

83 Research Outputs
FWCI:1.93

847 participants

Outreach **8** events

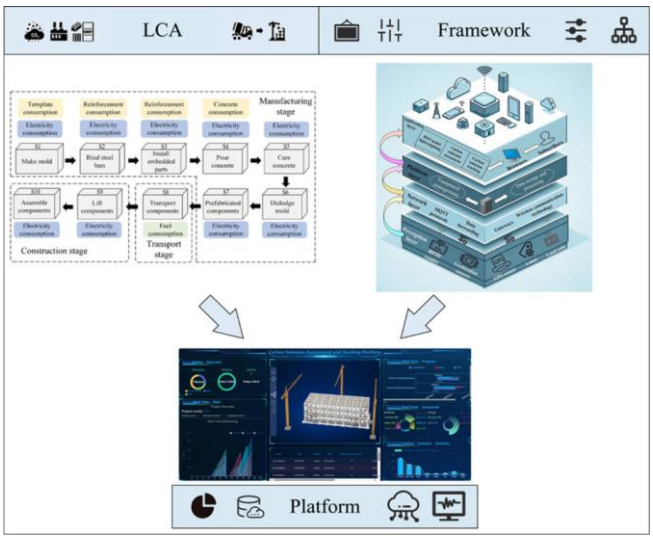
Empowering Educators for a Sustainable Future

Central to the mission of EdUHK is empowering educators to spearhead sustainability within their professional practice. Our **Master of Arts in Education for Sustainability** is specifically designed to equip teachers and educational professionals with the advanced knowledge and pedagogical skills required to integrate these crucial themes into their work. The programme fosters a deep understanding of environmental consciousness and climate awareness, enabling educators to cultivate a sense of responsibility and active engagement among their learners.

This is complemented by specialised coursework, such as the module on **Climate Change and Global Warming**, which provides students with a robust understanding of the scientific principles driving climate phenomena, as well as their global impacts and potential mitigation strategies. Through these integrated theoretical and practical approaches, EdUHK is cultivating a new generation of educators and learners who are informed, motivated, and capable of contributing positively to addressing the world's most pressing environmental challenges.

Pioneering Digital Solutions for a Low-Carbon Built Environment

Scholarly innovation at EdUHK is driving significant advancements in sustainable construction. Research involving Professor C.Y. Jim has led to the development of an integrated Building Information Modelling (BIM) and Internet of Things (IoT) platform, designed to assess and monitor carbon emissions during the materialisation of prefabricated building components.



Published in the leading journal Resources, Conservation and Recycling, this cutting-edge system facilitates the real-time tracking of environmental impacts throughout the construction supply chain. By providing accurate and dynamic data, the platform empowers the construction industry to precisely measure and manage its carbon footprint. This innovation is instrumental in promoting more sustainable building practices, supporting the transition to a low-carbon built environment and contributing to global climate action goals.

Source: Xiaojuan Li, Ming Jiang, Chengxin Lin, Rixin Chen, Meng Weng, C.Y. Jim, Integrated BIM-IoT platform for carbon emission assessment and tracking in prefabricated building materialization, *Resources, Conservation and Recycling*, Volume 215, 2025, 108122, ISSN 0921-3449

26th Primary STEAM Project Exhibition Exploring Climate Change

The 26th Primary STEAM Project Exhibition, titled "**Exploring Climate Change**," served as an innovative platform for young students to engage deeply with one of the most urgent environmental challenges facing the world today. By providing an interactive and educational space, the exhibition encouraged children to explore the causes, effects, and potential solutions related to climate change through hands-on activities, creative projects, and collaborative learning experiences. This early exposure aimed to cultivate a sense of environmental responsibility and awareness among young learners, fostering critical thinking and problem-solving skills essential for addressing future climate challenges.

The exhibition also promoted interdisciplinary learning, integrating science, technology, engineering, arts, and mathematics to help students understand complex climate issues from multiple perspectives. Such initiatives are vital in nurturing environmentally conscious citizens who are informed and motivated to participate in sustainable practices and climate action from an early age. Ultimately, by inspiring curiosity and understanding about climate change, the exhibition contributes to building a generation equipped with the knowledge and values necessary to protect our planet.

13 CLIMATE ACTION

EdUHK Research Team Promotes Indoor Air Quality Education in Sri Lanka

In addition, an EdUHK research team has played a vital role in promoting indoor air quality education in Sri Lanka, a project that significantly contributes to improving public health and environmental sustainability in the region. By collaborating with local communities, government agencies, and educational institutions, the team has facilitated the dissemination of critical knowledge about the importance of maintaining healthy indoor environments and reducing exposure to air pollutants. Their efforts include organising workshops, developing educational materials, and raising awareness about the sources of indoor air pollution and practical measures to mitigate its impact.

This initiative not only helps to support healthier living conditions for vulnerable populations, such as children and the elderly, but also aligns with broader global efforts to combat environmental health risks associated with poor indoor air quality. Through this project, EdUHK demonstrates its commitment to applying research for social good, fostering cross-cultural understanding, and addressing pressing environmental health issues in developing regions. Ultimately, these efforts contribute to building resilient communities capable of adopting sustainable practices that improve quality of life and reduce health disparities linked to environmental factors.

49 EdUHK Scholars Named World's Top 2% Scientists by Stanford University

Recognising the global impact of scientific excellence, 49 EdUHK scholars have been named among the world's top 2% scientists by Stanford University, a prestigious accolade that underscores the university's research prowess and commitment to advancing knowledge across various disciplines. This recognition is based on rigorous criteria, including research productivity, citation impact, and contributions to innovation and societal development. The achievement not only highlights the individual scholarly excellence of these researchers but also reflects EdUHK's broader capacity to foster a vibrant academic environment that encourages high-impact research aimed at addressing pressing global challenges, including climate change, environmental sustainability, and social development. The recognition elevates the university's reputation on the international stage, positioning it as a centre for innovative research and thought leadership that can contribute meaningfully to global efforts in tackling climate and environmental issues. Furthermore, such accolades inspire continued investment in research excellence and collaborative projects, reinforcing EdUHK's role in generating impactful solutions and advancing sustainable development goals through scholarly contributions.

Leading the Green Transition through Education and Collaboration

Recognising the urgency of the climate crisis, EdUHK is fostering partnerships specifically aimed at promoting a sustainable future. Our UNEVOC Centre (Hong Kong) is at the forefront of this effort. In February 2024, the Centre, with support from the UNESCO Beijing office, held a major symposium titled '**Empowering Youth – Skills for Green Innovation: Fostering Green Transition to a Sustainable Future**'. The symposium brought together a diverse group of stakeholders, including representatives from industry, youth organizations, educators, and students, to examine the role of education in implementing the SDGs. It served as a crucial first step towards developing joint projects and shared strategies for green innovation. A key focus was on empowering youth, who are perceived as the most active agents of change in supporting the green transition. This event marked the beginning of a long-term, project-based platform to be jointly implemented by UNESCO and the UNEVOC Centre at EdUHK, ensuring sustained momentum in this critical area.

A Strategic Approach to Energy Efficiency and Climate Action

The University is dedicated to enhancing energy efficiency across its campus and mitigating its climate impact through a comprehensive and forward-looking strategy. Our commitment is demonstrated through a wide range of energy-saving initiatives. These include the systematic replacement of traditional lighting with energy-saving LED fixtures and the deployment of smart control technologies, such as motion and occupancy sensors, which automatically switch off air conditioning systems when spaces are unoccupied. Furthermore, we have upgraded to high-efficiency equipment, improved the insulation of air-conditioning pipework to minimise thermal loss, and continuously optimised building services systems to ensure effective energy management.

To guide these efforts, the University has embedded climate change measures into its core policies and planning processes, establishing key performance indicators that focus on greenhouse gas emissions and electricity consumption. We have set clear and ambitious targets, committing to reduce per capita greenhouse gas emissions by 30% in Scope 1 (direct emissions) and Scope 2 (indirect emissions from electricity) by the 2030/31 academic year. Alongside this, the University aims to reduce electricity consumption per capita by 8% within the same timeframe. These targets reflect EdUHK's firm commitment to climate action, aligning with global and local sustainability goals.

Looking to the future, EdUHK will continue to replace lighting with LEDs and upgrade heating, ventilation, and air conditioning (HVAC) systems as required. We will also actively explore further energy-saving opportunities, including the retro-commissioning of existing building systems and expanding the use of smart control sensors to optimise system operations even more effectively.