

Lingnan University 2024/2025 SDG Report

SDG 13 – CLIMATE ACTION



22.57%

Reduction in Carbon Emission
(Scope 1 & 2)



59

Undergraduate Courses



184

Research Outputs



53

Research Projects and
Grants

Lingnan University embraces its liberal arts tradition to nurture students with global competence, civic responsibility, and a strong commitment to sustainable development. In response to the growing challenges of climate change, the University actively promotes environmental awareness and advances sustainability education across its programmes. Through hands-on learning experiences in practicum courses, interactive science events, and joint-university collaborations, Lingnan provides students with practical exposure and a robust network that empower them to become future leaders in climate action and sustainability.

Lingnan University Hosts Climate Change Expert Forum to Advance Regional Collaboration

Lingnan University co-hosted the Expert Report on the Fifth National Assessment Report on Climate Change – Hong Kong and Macao Special Report, bringing together leading scholars, government officials, and experts from Mainland China, Hong Kong, and Macao to exchange insights on climate science and policy. The event, organised by the Administrative Center for China's Agenda 21 (ACCA21) and supported by the National Natural Science Foundation of China (NSFC), underscored the importance of innovation and cross-regional cooperation in tackling climate change. Lingnan President Prof S. Joe Qin reaffirmed the University's dedication to sustainability through its academic and research initiatives in green finance, ESG investment, and energy transition, fostering a new generation of talent for low-carbon development and regional climate governance.



Bi-Loop Nature-Based Food Waste Regeneration Pilot Programme

A major highlight was the successful launch and expansion of the Bi-Loop Nature-Based Food Waste Regeneration Pilot Programme, which builds on the earlier *Bug Wars against Food Waste* initiative. This innovative project processes pre-meal food waste collected from multiple shopping malls using black soldier fly larvae, converting over three tonnes of waste annually into valuable organic fertiliser and fish feed. By substantially reducing the amount of organic waste sent to landfills, the programme helps lower greenhouse gas emissions associated with waste decomposition. The resulting produce is donated to charitable organisations, effectively closing the loop between waste reduction and community support.

Complementing this effort, the Joint-University Reusable Lunchbox Lending Programme, launched in 2023, continues to promote waste reduction on campus. It recorded 324 user sessions in the first half of 2025 alone, significantly reducing the reliance on disposable containers.



Redefining Hospitality Through Green Waste Management in the Eco-Innovation Challenge

In collaboration with A Plastic Ocean Foundation and Langham Hospitality Group, Lingnan co-hosted the Eco-Innovation Challenge 2025, a six-month boot camp featuring practical workshops, sustainability training, industry networking, and a creative competition that raised public awareness of waste management in the hospitality sector.

The Challenge attracted 30 teams and over 100 participants from both the university and public streams, supported by 20 industry fellows as mentors. Through meetings, training sessions, and job-shadowing opportunities, participants developed innovative sustainability solutions and competed for pilot implementation in Langham Hotels.

The Challenge proved to be an impactful initiative in advancing sustainability practices and promoting a greener global perspective within the hospitality industry.

Empowering Inclusive and Immersive Learning Through VR and AI Integration in Sustainability Education

Supported by the Fund for Innovative Technology-in-Education (FITE) established by the UGC, this interdisciplinary VR project integrates AI and VR technologies to enhance immersive learning across diverse disciplines, notably at Lingnan University and in Malaysia. At Lingnan, VR-powered sustainability activities guided by GenAI avatars have enabled students to engage more deeply with complex topics such as waste management and renewable energy, effectively bridging theory and practice while boosting student engagement and conceptual

understanding.

The project team partnered with Universiti Malaya to study the impact of VR on language learners in Malaysia, focusing on increasing accessibility and cultural relevance for Indigenous and low-income students. By customising VR platforms and avatars to reflect local contexts, the project enhanced inclusivity, learner engagement, and comprehension of sustainability concepts.

More recently, partnerships have expanded to include Universiti Kebangsaan Malaysia (UKM), Thomas Cheung Secondary School in Hong Kong, two primary schools in China, and the Langham Hospitality Group, which plans to deploy GPT-powered avatars in a real-world hackathon. In Malaysia and China, the initiative has also reached low-income and Indigenous communities, including the Orang Asli group. These pilot efforts have revealed promising opportunities for personalised learning, with early observations highlighting diverse levels of technology adoption and user comfort.

The project was recognised as one of the Top 10 finalists in the QS Reimagine Education Awards 2024, underscoring its innovative contribution to inclusive and sustainable education.

Developing Coastal Threat Index and Map-Based Dashboard for Hong Kong

In collaboration with China Water Risk (CWR), a think tank dedicated to addressing climate related water risks and resilience, this research and consultancy project applied Geographical Information Systems (GIS) and Remote Sensing technologies to develop a Coastal Threat Index for Hong Kong. A robust analytical framework was established to benchmark coastal threats across the territory, which was then transformed into an interactive map based web application and dashboard.

This tool allows CWR to visualize potential sea level rise and flooding risks under multiple climate scenarios, providing valuable insights into how these threats may evolve geographically. The resulting risk index and online platform serve as practical instruments to support climate risk assessment and stress testing for the business and finance sectors, strengthening Hong Kong's preparedness for future coastal and climate challenges.

Courses Related to SDG 13: Climate Action

Our educational programmes continue to play a pivotal role in cultivating environmental

awareness and expertise among students and professionals. At the undergraduate level, cluster courses such as CLD9012 Natural Disasters: Science and Society, CLD9017 Ecology: The Science of Environmental Issues, and CLD9027 Blue Planet attracted 153 students. These courses enhanced students' understanding of natural disasters, ecology, and climate science, while encouraging them to reflect on personal actions and lifestyles, fostering a sense of responsibility and active engagement in building a more sustainable future for our planet.

At the postgraduate level, Lingnan launched the Master of Science in Sustainability and Environmental Analytics (MScSEA) and the Executive Professional Education (EPE) Programme on Sustainable Finance & ESG Analytics. The MScSEA admitted 48 students in 2024–25, equipping them with interdisciplinary knowledge and analytical skills to address complex climate challenges. Meanwhile, the EPE programme — the first of its kind in the Greater Bay Area (GBA) aligned with the Certified ESG Analyst (CESGA) global certification—has successfully trained 129 students across three cohorts, empowering professionals to integrate sustainable finance and ESG principles into strategic decision making processes.

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Green Living and Sustainability Outreach

Beyond academic initiatives, the Science Unit has actively engaged both the campus community and the public through a diverse range of events promoting low carbon and sustainable lifestyles. Activities such as low CO₂ food challenges and tasting tours, cycling initiatives, zero waste living fairs, and environmental workshops have encouraged participants to adopt greener daily practices. Strategic collaborations with partners including A Plastic Ocean Foundation and The Jockey Club Sustainable Campus Consumer Programme (JCSCCP) have further amplified this impact by fostering sustainable habits among students and local residents.

The Science Unit continues to demonstrate a strong and sustained commitment to SDG 13 (Climate Action) through an integrated approach encompassing education, innovation, community engagement, and strategic partnerships. By advancing interdisciplinary teaching and research, expanding circular economy practices, and deepening collaborations with external stakeholders, Lingnan is building a solid foundation for long-term impact. Looking ahead, Lingnan University remains dedicated to driving systemic change, empowering individuals and communities to take meaningful climate action, and reinforcing its role as a regional leader in sustainability and climate resilience for future generations.