

Chinachem Group Sustainability Conference 2024

Integrating Sustainability Solutions towards a Resilient Future

DISCUSSION:

Climate-resilient and
Environment



Moderator: Professor Thomas CHUNG, Associate Professor, School of Architecture, CUHK

Panel Discussion

“Pathways to a Climate-resilient and Inclusive Built Environment”

Summary

Mr CHONG Chan-yau, Co-founder and Chief Executive Officer, CarbonCare Innolab

- Mr CHONG introduced the SolarCare programme, which builds solar systems on NGO buildings in Hong Kong.
- There is potential for large-scale solar energy in urban environments, countering the belief that Hong Kong is unsuitable for solar initiatives.
- A total of 34 solar systems have been successfully implemented, with plans to expand to 60, contributing to carbon reduction and clean energy generation.
- Community engagement occurs through educational programs linked to solar installations, targeting vulnerable groups.
- The government's feed-in tariff scheme incentivises renewable energy production by allowing NGOs to sell generated electricity.
- Increased government investment in renewable energy is necessary to meet carbon neutrality goals by 2050.

Mr Peter CT LEE, General Manager, Sustainability, Airport Authority Hong Kong

- Mr LEE discussed the importance of both reactive and proactive measures in addressing climate change at the airport.
- A commitment to a net-zero carbon pathway exists, collaborating with 30 business partners to reduce emissions.
- Operation of the Airport Authority and the airport business partners contributes about 80% of ground emissions, necessitating extensive collaboration for effective decarbonisation.
- Immediate action is required, rather than waiting until 2050 to address climate challenges.
- Innovative design plays a crucial role in preparing for climate emergencies and enhancing resilience.
- Proactive measures are essential to ensure sustainable operations in the face of climate change.

Professor Alexis LAU, Head and Chair Professor, Division of Environment and Sustainability, HKUST

- Professor LAU advocated for strong governmental leadership and stringent environmental targets to drive climate action.
- Collaboration between academia, government, and industry is essential for achieving environmental goals.
- The current trajectory in Hong Kong overshoots the 1.5 degrees Celsius target, necessitating urgent action.
- Carbon pricing serves as a fundamental economic driver for sustainability efforts.
- Credible data collection supports environmental initiatives and informs decision-making.
- Ambitious targets push businesses toward innovative solutions.

Professor LAM Khee-poh, Provost's Chair Professor of Architecture and the Built Environment, National University of Singapore

- Professor LAM urged for a transition beyond incremental approaches to achieve net-zero buildings, which is already feasible with current technology.
- New challenges in sectors like healthcare and elderly care require urgent attention and innovative solutions.
- Aiming for 100% improvement in sustainability efforts is crucial, rather than settling for partial improvements.
- Convincing healthcare professionals of the need for sustainable practices poses significant challenges, necessitating rigorous scientific collaboration.
- Traditional financial reporting methods focus on short-term gains, which must evolve to account for long-term sustainability and external costs.
- Credible and detailed data collection is vital to effectively communicate the impacts of sustainability on everyday life and costs.
- Sustainability must encompass all 17 Sustainable Development Goals, with a focus on responsible production and consumption, while considering the full lifecycle carbon impact of solutions.

Mr CHEN Shao-xiang, Party Secretary, Chairman of Guangdong Provincial Academy of Building Research Group Co., Ltd.; Chairman, the Guangdong-Hong Kong-Macao Greater Bay Area (the GBA) Building Technology Alliance

- Mr CHEN discussed the ongoing efforts in Guangdong to enhance urban resilience and smart city initiatives.
- Gaps in policies and technical standards need to be addressed for improved resilience.
- Integration of talent exchange and technology sharing across regions is essential for solving climate challenges.
- Development of historical buildings in Guangdong forms part of the sponge city concept.
- Greater collaboration between universities, public institutions, and the private sector promotes innovative building solutions.
- Opportunities for technology integration in urban planning and construction are significant.
- consumption, while considering the full lifecycle carbon impact of solutions.

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華懋集團

可持續發展論壇 2024

多元可持續發展方案 應對未來挑戰



主持人：香港中文大學建築學院副教授 鍾宏亮教授

專題討論

「邁向多元的氣候韌性建築環境」

重點

低碳想創坊聯合創辦人及行政總裁莊陳有先生

- 莊先生介紹了「太陽能關懷計劃」，該計劃協助香港的非牟利機構在其建築上加設太陽能系統。
- 計劃證明在城市環境中設置大規模太陽能設施具有潛力，這反駁香港不適合太陽能項目的觀點。
- 目前已成功加設34個太陽能系統，並計劃擴展至60個，為減低碳排放及潔淨能源生產作出貢獻。
- 通過與太陽能安裝相關並針對弱勢群體的教育計劃，推動社區參與。
- 政府的上網電價計劃允許非牟利機構出售產生的電力，以鼓勵可再生能源的生產。
- 政府對可再生能源的投資需要增加，以實現2050年達至碳中和的目標。

香港機場管理局可持續發展總經理李仲騰先生

- 李先生討論了被動和主動措施在機場應對氣候變化時的重要性。
- 機場承諾走上淨零之旅，與30名商業夥伴合作，以減少排放。
- 機場管理局及機場合作夥伴的營運佔地面積約80%，因此需要廣泛的合作以落實有效的減碳。
- 機場必須立即採取行動，而非等到2050年才應對氣候挑戰。
- 創新設計在應對氣候緊急情況和增強韌性方面發揮著關鍵作用。
- 主動措施對於確保在氣候變化中持續營運至關重要。

香港科技大學環境及可持續發展學部主任及講座教授劉啟漢教授

- 劉教授主張需要強而有力的政府領導和嚴格的环境目標來推動氣候行動。
- 學術界、政府和業界之間的合作，對於實現環境目標至關重要。
- 香港目前的發展軌跡超過了1.5攝氏度的目標，因此氣候行動迫在眉睫。
- 碳定價是推動可持續發展的基礎經濟驅動力。
- 收集可靠數據有助支持環境倡議，並為決策提供資訊。
- 進取的目標能推動企業尋求創新解決方案。

新加坡國立大學建築學院院長林棋波教授

- 林教授呼籲超越漸進式方法 (incremental approaches)，以實現淨零建築，這在當前技術下已是可行的。
- 醫療和長者照護等領域的新挑戰需要急切關注及創新方案。
- 追求百份百的可持續發展改進至關重要，不應滿足於局部改進。
- 說服醫療專業人員採用可持續發展實踐面臨重大挑戰，這需要嚴謹的科學合作。
- 專注於短期收益的傳統財務報告方法必須演變，以考慮長期可持續發展和外部成本。
- 收集可信且詳細的數據，對於有效傳達可持續發展對日常生活和成本的影響具關鍵作用。
- 可持續發展必須涵蓋所有17項可持續發展目標，重點在於負責任的生產和消費，並同時考慮解決方案的整個生命週期碳影響。

廣東省建築科學研究院黨委書記及董事長、粵港澳大灣區建築科技聯盟理事長陳少祥先生

- 陳先生討論了廣東省在增強城市韌性和智慧城市倡議方面的持續努力。
- 必須解決政策和技術標準之間的差距，才能改善韌性。
- 跨地區的人才交流和技術共享的整合，對於解決氣候挑戰至關重要。
- 廣東省的歷史建築發展是「海綿城市」概念的一部分。
- 大學、公營機構和私營機構之間的更廣泛合作促進創新的建築解決方案。
- 城市規劃及建設的技術整合蘊含極大發展機遇。

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