Chinachem Group
Sustainability Conference 2024
Integrating Sustainability Solutions towards a Resilient Future

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

Summary

"From Climate Science to Resilient Built Environment for Communities"

- Professor Alexis LAU expressed his gratitude to the conference organisers for the opportunity to speak on the impacts of climate change and the role of communities in addressing these challenges from the perspective of climate science.
- He stated that climate change is not a future concern but a current reality impacting communities worldwide.
- Professor LAU identified extreme heat as the most significant mortality risk related to climate change, referencing data from the World Health Organisation (WHO).
- He noted that since June 2023, every month has set new global temperature records, indicating an alarming trend of rising temperatures and increasing emissions.
- To illustrate the dangers, he recounted the 2003 heat wave in Paris, which resulted in over 14,000 deaths in just 20 days, highlighting the need for effective governmental responses.
- He emphasised the importance of adapting recommendations for vulnerable populations, such as the elderly, who may misjudge their risks in extreme heat conditions.
- Professor LAU discussed flooding as another critical risk, citing incidents where individuals died while attempting to save their cars during floods, including events in Hong Kong and South Korea.
- He advocated for the creation of a climate risk database to track emerging threats and improve safety measures and public awareness.
- The need for community resilience was emphasised, with a call for people-centred planning and communication strategies to ensure that local needs are met.
- Professor LAU suggested that Hong Kong could serve as a testing ground for innovative climate adaptation solutions due to its advanced infrastructure and digital capabilities.
- He highlighted the challenges of weather forecasting in tropical regions, calling for improved predictive models to enhance climate response efforts.
- Lau pointed out the opportunities presented by climate change initiatives, particularly in improving indoor air quality through building retrofits.
- He stressed that retrofitting not only reduces energy consumption but also promotes healthier living environments.
- Professor LAU mentioned ongoing collaborations with WHO to develop a regional climate risk hub in Southeast Asia for sharing best practices and archiving emerging risks.
- He concluded by urging collective action and proactive measures to create a safer and healthier future for communities in the face of climate change.

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多元可持續發展方案 應對未來挑戰

劉啟漢教授
香港科技大學環境及可持續發展學部主任及講座教授

重 點

「從氣候科學到為社群而設的韌性建築環境」

- 劉啟漢教授感謝論壇主辦及合辦單位提供機會，讓他從氣候科學的角度講述氣候變化的影響，以及社區在應對這些挑戰中的角色。
- 他指出，氣候變化並不是未來的事情，而是當前影響著全球所有社群的現實。
- 劉教授認為極端高溫是與氣候變化相關的最大死亡風險，並引用了世界衛生組織（WHO）的數據闡述此觀點。
- 他提到，自2023年6月以來，每個月都創下全球氣溫的新紀錄，顯示出氣溫上升和排放增加的驚人趨勢。
- 為了說明這些危險，他回顧了2003年巴黎的熱浪事件，該事件在僅僅20天內導致超過14,000人死亡，反映了政府有效應對此類事件的必要性。
- 他亦強調根據弱勢社群需求（例如老年人）而調整建議的重要性，因為這些群體可能會在極端高溫條件下錯誤評估自己的風險。
- 劉教授討論了另一個重大風險——水浸，提到一些人在水浸中試圖拯救自己的車輛卻因而喪生，當中包括香港和南韓的案例。
- 他倡導建立氣候風險數據庫，以追蹤新興威脅，並改善安全措施和提高公眾意識。
- 他強調社區韌性的必要性，呼籲實踐以人為本的規劃和溝通策略，以確保滿足各地方的需求。
- 劉教授建議，由於香港擁有先進的基礎設施和數碼技能，可以作為創新氣候適應解決方案的試點。
- 他指出熱帶地區氣象預測的挑戰，呼籲改進預測模型以增強氣候應對工作。
- 劉教授指出氣候變化倡議所帶來的機會，特別是在通過建築改造去改善室內空氣質素。
- 他強調改造不僅能減少能耗，還有助促進更健康的生活環境。
- 劉教授提到正在與WHO合作，在東南亞建立一個區域氣候風險中心，以分享最佳實踐案例和記錄新興風險。
- 他最後敦促大家共同採取行動和主動措施，以應對氣候變化，為社區創造一個更安全、更健康的未來。

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