



ARCASIA INTER-COMMITTEE REPORT for 44th COUNCIL MEETING

Ar. Alice Leong Pek Lian | ACGSA Chair 2024-25



INTER-COMMITTEE PLAN PROGRAM

APRIL 2025

2025

Carbon Capture and Storage for Architecture Toward Achieving Low Carbon Emissions WEBINAR

As the built environment is responsible for a significant portion of global carbon emissions, architects and construction professionals must explore innovative strategies to meet the urgent need for a low-carbon future. This webinar on "Carbon Capture and Storage (CCS) for Architecture Toward Achieving Low Carbon Emissions" delves into how CCS technologies can help achieve sustainable, low-carbon architecture.

The session will introduce the principles of carbon capture and storage, focusing on how these technologies capture CO₂ emissions from building operations and industrial sources and store them safely to prevent atmospheric release.

ACGSA intent to initial this webinar in **April 2025** to include the ARCASIA INTER-COMMITTEE (ACGSA, ACAE, ACPP, ACSR & ACYA) to discuss and share on the direction through guidelines and tools, education to create awareness, practical practices approaches for integrating CCS in architectural design, building systems, and construction materials to drastically reduce the carbon footprint of buildings. We, ACGSA, hope to spread this knowledge to society and community within ARACSIA region for betterment of our industry.



Attendees will learn about advancements in sustainable building materials, such as carbon-absorbing concrete, and cutting-edge energy-efficient solutions. Real-world case studies will highlight projects where CCS has been successfully incorporated to drive toward carbon neutrality and even carbon positivity in architecture.

By the end of the webinar, participants will have a deeper understanding of CCS technologies, their role in the transition to low-carbon architecture, and how they can contribute to a sustainable, carbon-free future for the built environment.



ARCASIA INTER-COMMITTEE REPORT for |

44th COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA

INTER-COMMITTEE PLAN PROGRAM

MAY 2025

2025

CARBON NEUTRAL & ZERTO CARBON EMISSION WORKSHOP

This workshop, organized as a collaboration between ACGSA & ACPP, focuses on achieving carbon neutrality and zero carbon emissions in architectural practice. It will explore cutting-edge strategies, technologies, and design approaches that architects can implement to reduce the environmental impact of buildings. Which will enhancing the current in progress of **ACGSA's Guidebook on "Achieving Zero Carbon Emission through Carbon Neutrality and Carbon Capture Storage"** target to complete by end 2025.

Topics will include sustainable materials, energy-efficient design, and innovative solutions like carbon capture and storage. Participants will engage in discussions and case studies to better understand the pathways toward carbon-neutral and zero-emission architecture, fostering a collective effort to create a more sustainable built environment.



INTER-COMMITTEE PLAN PROGRAM

AUGUST 2025 **2025**

CAMPAIGN IN PROMOTING INDOOR AIR QUALITY BY
REDUCING CARBON EMISSION THROUGH
ARCHITECTURE

ACGSA wish to initial a **Campaign in “Promoting indoor air quality while reducing carbon emissions through architecture”**.

The purpose of this Campaigning involves innovative strategies that merge sustainability with functionality. By integrating green building materials, energy-efficient designs, and renewable energy sources, architects can minimize a building's carbon footprint. Features like enhanced ventilation systems, natural lighting, and green roofs help improve air quality while reducing reliance on artificial energy sources. Passive design strategies, such as strategic placement of windows for cross-ventilation and thermal insulation, further optimize energy use. Incorporating smart technologies and urban greenery not only ensures healthy indoor environments but also contributes to a broader fight against climate change and carbon emissions.

ACGSA initiative aims are to promote indoor air quality (IAQ) across 22 countries under ARCAISA, emphasizing its crucial role in the future of architecture.

As urbanization and environmental concerns rise, ensuring healthy indoor environments is vital for occupant well-being and sustainable building design. This initiative will advocate for IAQ improvements through research, policy development, and the integration of sustainable materials and technologies in architecture.

By fostering collaboration among architects, engineers, and policymakers, to establish guidelines and best practices to enhance IAQ, paving the way for healthier, more sustainable buildings in Asia's future urban landscapes.

We, ACGSA, will further discuss the detail on this collaboration among ACSR & ACYA on this CAMPAIGN program.



ACGSA
ARCASIA COMMITTEE ON
GREEN & SUSTAINABLE
ARCHITECTURE



ARCASIA INTER-COMMITTEE REPORT *for* |

44th COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA

END ARCASIA INTER-COMMITTEE REPORT

&

THANK YOU



ACGSA
ARCASIA COMMITTEE ON
GREEN & SUSTAINABLE
ARCHITECTURE

