



ARCASIA Committee on Green & Sustainable Architecture

**ARCASIA COMMITTEE ON  
GREEN & SUSTAINABLE  
ARCHITECTURE**

# ACGSA REPORT for 44<sup>th</sup> COUNCIL MEETING

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

**ACGSA CHAIRMAN**



**AR. IDR. ALICE LEONG PEK LIAN (PAM)**



44<sup>th</sup> COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA

# ACGSA 2024 ANNUAL REPORT

20<sup>TH</sup> January 2024 – Handover of new ARCASIA OB/CC



Handing over from out-going ACGSA CHAIR, Ar. Tushar Sogani to in-coming ACGA Chair, Ar. Alice Leong Pek Lian

## 19<sup>th</sup> – 21 January 2024 – Handing Over Ceremony & First Meeting of ARCASIA OB/CC 2024-25 held at Kuala Lumpur, Malaysia

During the Handover ceremony and the first meeting of ARCASIA OB/CC meeting, key agenda items were discussed, including the review of ongoing projects and future initiatives. The out-going president and out-going committee chairs acknowledged the hard work of out-going committee members and emphasized the importance of collaboration. The new OB/CC shall continue and initiate more programs and activities. The financial report highlighted both successes and areas for improvement, prompting a discussion on resource allocation. Members shared updates and insights that will drive our objectives forward. The meeting concluded with a call for continued engagement and communication, reinforcing our commitment to achieving our goals. A follow-up meeting is scheduled to assess progress.



Handing over from out-going ACGSA CHAIR, Ar. Tushar Sogani to in-coming ACGA Chair, Ar. Alice Leong Pek Lian



**ACGSA**  
ARCASIA COMMITTEE ON  
GREEN & SUSTAINABLE  
ARCHITECTURE



# ACGSA 2024 ANNUAL REPORT

19<sup>th</sup> -21<sup>st</sup> January 2024 – Handover Ceremony & First meeting of new ARCASIA OB/CC



First Meeting of ARCASIA OB/CC 2024-25



Group photo of out-going and in-coming ARCASIA OB/CC



Group photo of out-going and in-coming ARCASIA OB/CC



ARCASIA new Committee Chairs 2024-25 (from left: ACAE, ACGSA, ACSR, ACPP & ACYA)



ACGSA REPORT for |  
44<sup>th</sup> COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA

# ACGSA 2024 ANNUAL REPORT

2<sup>nd</sup> MARCH 2024 & 30<sup>TH</sup> MARCH 2024 1<sup>st</sup> and 2<sup>nd</sup> CC MEETING

Committed in Ulaanbaatar on 7<sup>th</sup> September 2022 the VISION & MISSION

## THE VISIONS

To create architects becoming the leaders in the world of future sustainable development.

## THE MISSIONS (A.L.I.C.E)

- A** = **Achieving** For Sustainable Development
- L** = **Leading** Architect to A Sustainable Future
- I** = **Impact** For Safe Future Global
- C** = **Climate Change** & Energy Option For Sustainable Future
- E** = **Excellence Educating** For Sustainable Future



# ACGSA 2024 ANNUAL REPORT

2<sup>nd</sup> MARCH 2024 & 30<sup>TH</sup> MARCH 2024 1<sup>st</sup> and 2<sup>nd</sup> CC MEETING

## ACGSA 2024-2026 Missions & Program

The **visions** as the new chairman of ACGSA is to create architects becoming the leaders in the world of future sustainable development. The missions and proposed program for ACGSA for this new term (2024-2026) are as follows: -

### Missions (A.L.I.C.E)

- A** = **Achieving** For Sustainable Development
- L** = **Leading** Architect to A Sustainable Future
- I** = **Impact** For Safe Future Global
- C** = **Climate Change** & Energy Option For Sustainable Future
- E** = **Excellence Educating** For Sustainable Future

### Propose Programs / Activities

Net Zero was the basic goal of Paris Agreement and by 2050 the world target to achieve net zero carbon and many countries had signed to work together to meet the goal. To reach net zero targets requires actions to reduce emissions. The propose programs will be: -

- Conduct a ACGSA workshop to discuss and to work out and publish a guide book for Low / Net Zero Carbon Emissions
- Collaborate with other ARCASIA Committees to educating and promote future generations for sustainable development. Due to growing concern for our environment, buildings use a lot of energy and often contribute to pollution and waste. Activities such as: Talks, CSRs etc
- Exploring safer energy for safe future global in round table meeting e.g. carbon neutral, carbon storage etc.
- Exploring more publicity for architects' involvement in sustainable development - enhancing the website, content marketing, social media etc.
- To initial Green Architecture Competition - architects to produce smart design and use available technologies to ensure that structures generate minimal harmful effects to ecosystem and the communities.
- To renew / upgrade the ACGSA Declaration to match the latest needs to achieve sustainable development relate matters

Prepared by:  
**Ar. IDr. Alice Leong Pek Lian**  
**Chairman of ACGSA**

Date: 25 Feb 2024

# ACGSA 2024 ANNUAL REPORT

2<sup>nd</sup> MARCH 2024 & 30<sup>TH</sup> MARCH 2024 1<sup>st</sup> and 2<sup>nd</sup> CC MEETING



ACGSA Chair presented her vision and missions at the same time to match with ARCASIA President's vision.

1. Conduct a ACGSA workshop to discuss and to work out and **publish a guide book for Low / Net Zero Carbon Emissions**
2. **Exploring safer energy for safe future** global in ACGSA round table meetings & online meetings e.g. carbon neutral, carbon storage etc
3. To initial **Green Architecture Competition**
4. Collaborate with other ARCASIA Committees: **to educate and promote future generations for sustainable development.**
5. To **renew / upgrade the ACGSA Declaration** to match the latest needs to achieve sustainable development relate matters
6. **Exploring more publicity** for architects' involvement in sustainable development

# ACGSA 2024 ANNUAL REPORT

13<sup>th</sup> April 2024 – Inter-committee Webinar



**INTER-COMMITTEE SDG WEBINAR 2024**

The 17 Sustainable Development Goals (SDGs) aims the ending poverty and other deprivations with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. ARCSIA representing 22 Architectural Institutes in the Asian Region shall define the way forward for developing our Asian approach on the SDGs. During this Webinar, our Committee Chairs will share their perspectives on how their Committees address, implement and promote these SDGs so that we can conclude to develop some guide for ARCSIA to move on.

**Welcome Speech by**  
**ARCSIA PRESIDENT 2024 - 2025**

**Ar. Saifuddin Ahmad**  
 FPAM MGBC MID RAlA (hon member) ASA (Hon. Member)  
 APEC architect ASEAN architect

**Convenor**  
**ARCSIA ZONE C**  
**VICE-PRESIDENT 2024 - 2025**

**Ar. Thomas Cheung**  
 FHKIA HK Registered Architect  
 APEC architect

**DATE : 13 APRIL, 2024 (SAT)**  
**TIME : 14:00 KL TIME (UTC+08:00)**

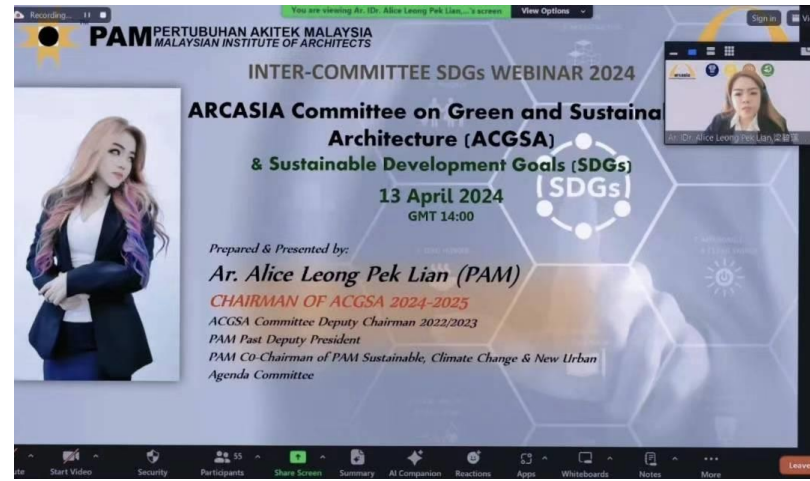
**GOOGLE FORM & QR CODE FOR REGISTRATION**  
<https://forms.gle/h911WdNRGQJodZRL8>



**LOVE**  
 ARCSIA 2024 - 2025

**Presentation by 2024 - 2025 ARCSIA COMMITTEE CHAIRS**

- ACAE CHAIRMAN**  
**Ar. Jonathan Manalad**  
 United Architects of the Philippines (UAP)
- ACGSA CHAIRLADY**  
**Ar. Alice Leong Pek Lian**  
 Pertubuhan Akitek Malaysia (PAM)
- ACPP CHAIRMAN**  
**Ar. Zhang Wei**  
 Architectural Society of China (ASC)
- ACSR CHAIRLADY**  
**Ar. Farhana Sharmin Emu**  
 Institute of Architects Bangladesh (IAB)
- ACYA CHAIRMAN**  
**Ar. Denny Setiawan**  
 Ikatan Arsitek Indonesia (IAI)



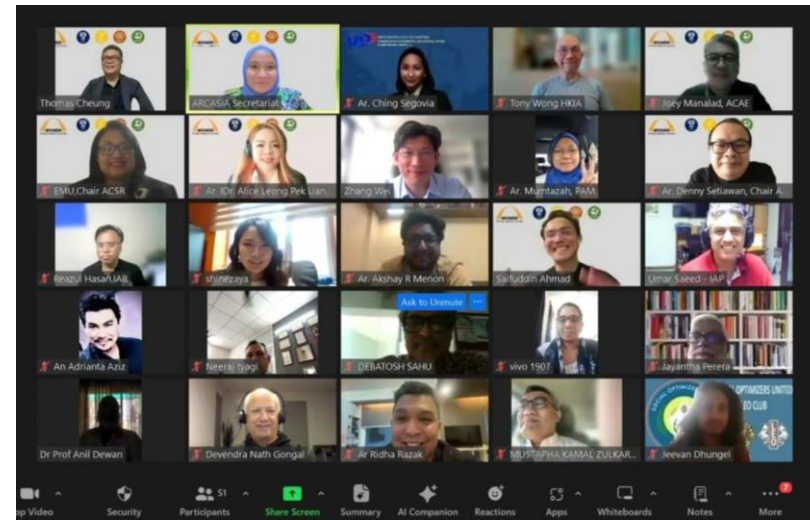
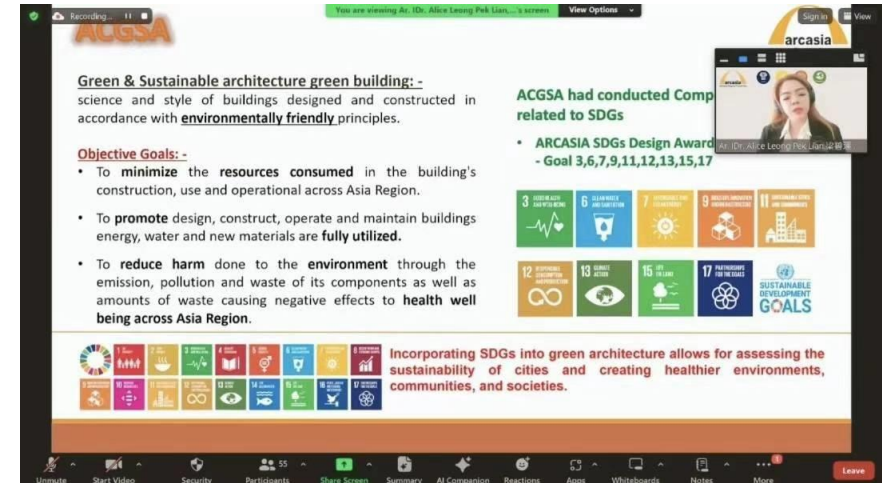
**PAM** PERTUBUHAN AKITEK MALAYSIA  
 MALAYSIAN INSTITUTE OF ARCHITECTS

**INTER-COMMITTEE SDGs WEBINAR 2024**

**ARCASIA Committee on Green and Sustainable Architecture (ACGSA) & Sustainable Development Goals (SDGs)**

**13 April 2024**  
 GMT 14:00

Prepared & Presented by:  
**Ar. Alice Leong Pek Lian (PAM)**  
 CHAIRMAN OF ACGSA 2024-2025  
 ACGSA Committee Deputy Chairman 2022/2023  
 PAM Past Deputy President  
 PAM Co-Chairman of PAM Sustainable, Climate Change & New Urban Agenda Committee

**Green & Sustainable architecture green building:** - science and style of buildings designed and constructed in accordance with **environmentally friendly** principles.

**Objective Goals:** -

- To minimize the resources consumed in the building's construction, use and operational across Asia Region.
- To promote design, construct, operate and maintain buildings energy, water and new materials are fully utilized.
- To reduce harm done to the environment through the emission, pollution and waste of its components as well as amounts of waste causing negative effects to health well being across Asia Region.

**ACGSA had conducted Comp related to SDGs**

- ARCASIA SDGs Design Award - Goal 3,6,7,9,11,12,13,15,17

Incorporating SDGs into green architecture allows for assessing the sustainability of cities and creating healthier environments, communities, and societies.

An Inter-committee Webinar was held on 13<sup>th</sup> April 2024, focusing on SDGs.

ACGSA presented on how ACGSA could contributed all the activities to integrating with SDGs & ESGs



# ACGSA 2024 ANNUAL REPORT

13<sup>th</sup> April 2024 – Inter-committee Webinar

**PAM** PERTUBUHAN AMITEK MALAYSIA  
REGULATORY INSTITUTE OF ARCHITECTS

INTER-COMMITTEE SDGs WEBINAR 2024

**ARCASIA Committee on Green and Sustainable Architecture (ACGSA) & Sustainable Development Goals (SDGs)**  
13 April 2024  
GRT Level

Presented & Hosted by:  
**Ar. Alice Leong Pek Lian (PAM)**  
CHAIRMAN OF ACGSA 2023-2025  
ARCASIA Committee Deputy Chairman 2020-2023  
ARCASIA Past Deputy President  
ARCASIA Co-Chairman of AECM Sustainable Climate Change & New Urban Agenda Committee

1

**ACGSA**

The Sustainable Development Goals (SDGs) play a crucial role in green & sustainable architectural, as buildings contribute 39% of global energy-related carbon emissions, and 50% of extracted materials are used in construction.

2

**ACGSA**

Green & Sustainable architecture green building: science and style of buildings designed and constructed in accordance with governmentally friendly provisions.

**Objectives Goals:**

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- To promote design, construct, operate and maintain building energy, water and raw materials are fully utilized.
- To reduce harm done to the environment through the emission, pollution and waste of its components as well as amounts of waste causing negative effects to health and living across Asia Region.

**ACGSA has conducted Competitions related to SDGs:**

- ARCASIA SDG Design Award 2023 - Best 14, 7, 8, 11, 12, 13, 17

3

**ACGSA**

**ACGSA KEY VISIONS**  
To create architects becoming the leaders in the world of future sustainable development.

**THE MISSIONS (A.L.L.I.C.E)**

- A - Addressing For Sustainable Development
- L - Leading Architect to A Sustainable Future
- T - Designing For Sustainable Global
- C - Climate Change & Energy Optimis For Sustainable Future
- E - Excellence Educating For Sustainable Future

**L.O.V.E**  
E.S.G

4

**ACGSA**

What is ACGSA's role in SDGs

5

**ACGSA**

2024 play very important role

6

**ACGSA**

**Ensure healthy lives and promote well-being for all at all ages**

Goal 3: GOOD HEALTH & WELL-BEING – Ensure healthy lives and promote well-being for all at all ages

- A building is designed can affect the health and well-being of its occupants.
- Green building features, such as improved lighting, better air quality and greenery, have been proven to positively impact health and well-being.
- Not just support healthier, happier and more productive lives, but also reducing emissions from buildings – particularly in cities – can reduce pollution and improve air quality, benefiting the health of city dwellers.

7

**ACGSA**

**Goal 7: AFFORDABLE AND CLEAN ENERGY – Ensure access to affordable, reliable, sustainable and modern energy for all**

Goal 8: DECENT WORK AND ECONOMIC GROWTH – Promote inclusive and sustainable economic growth, employment and decent work for all

8

**ACGSA**

**Goal 8: DECENT WORK AND ECONOMIC GROWTH – Promote inclusive and sustainable economic growth, employment and decent work for all**

9

**ACGSA**

**Goal 11: SUSTAINABLE CITIES AND COMMUNITIES – Make cities inclusive, safe, resilient and sustainable**

10

**ACGSA**

**Goal 11: SUSTAINABLE CITIES AND COMMUNITIES – Make cities inclusive, safe, resilient and sustainable**

11

**ACGSA**

**Goal 12: RESPONSIBLE CONSUMPTION & PRODUCTION – Ensure sustainable consumption and production patterns**

**RESPONSIBLE CONSUMPTION & PRODUCTION. SMART SOLUTIONS.**

12

**ACGSA**

**Goal 13: CLIMATE ACTION – Take urgent action to combat climate change and its impacts**

13

**ACGSA**

**Goal 14: LIFE BELOW WATER – Conserve and sustainably use the oceans, seas and coastal resources**

14

**ACGSA**

**HOW SUSTAINABLE BUILDINGS**

15

**ACGSA**

**Building Resilience**

16

**ACGSA**

**Building Resilience**

17

**ACGSA**

**Building Resilience**

18

**ACGSA**

Embracing SDGs is a moral responsibility and a strategic business decision.

By integrating these principles into your projects, you'll position yourself as a leader in the industry, meeting the evolving demands of your clients and staying ahead of your competition.

19

**ACGSA**

Global Challenges toward Low-Carbon Society (LCS) through Sustainable Development (SD)

Thank You

20



# ACGSA 2024 ANNUAL REPORT

13<sup>th</sup> April 2024 – Inter-committee Webinar



## Green building: Improving the lives of billions by helping to achieve the UN Sustainable Development Goals

Many might look at a building and see only an inanimate structure.

BUT we look at buildings and see both the physicality *and* the process by which they are created – an opportunity to not only save energy, water and carbon emissions but to educate, create jobs, strengthen communities, improve health and wellbeing, and much, much more.

Green building is a true catalyst for addressing some of the world's most pressing issues.

# ACGSA 2024 ANNUAL REPORT

13<sup>th</sup> April 2024 – Inter-committee Webinar

**8 DECENT WORK AND ECONOMIC GROWTH**

**3 GOOD HEALTH AND WELL-BEING**

Ensure healthy lives and promote well-being for all at all ages

**1 NO POVERTY**  
Goal 1: In all its forms, eradicate poverty everywhere

**2 ZERO HUNGER**  
Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

**3 GOOD HEALTH AND WELL-BEING**  
Goal 3: Ensure healthy lives and promote well-being for all at all ages

**4 QUALITY EDUCATION**  
Goal 4: Ensure inclusive and quality education for all and promote lifelong learning

**5 GENDER EQUALITY**  
Goal 5: Achieve gender equality and empower all women and girls

**6 CLEAN WATER AND SANITATION**  
Goal 6: Ensure access to water and sanitation for all

**7 AFFORDABLE AND CLEAN ENERGY**  
Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

**8 DECENT WORK AND ECONOMIC GROWTH**  
Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

**9 INDUSTRY, INNOVATION AND INFRASTRUCTURE**  
Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

**10 REDUCED INEQUALITIES**  
Goal 10: Reduce inequality within and among countries

**11 SUSTAINABLE CITIES AND COMMUNITIES**  
Goal 11: Make cities inclusive, safe, resilient and sustainable

**12 RESPONSIBLE CONSUMPTION AND PRODUCTION**  
Goal 12: Ensure sustainable consumption and production patterns

**13 CLIMATE ACTION**  
Goal 13: Take urgent action to combat climate change and its impacts

**14 LIFE BELOW WATER**  
Goal 14: Conserve and sustainably use the oceans, seas and marine resources

**15 LIFE ON LAND**  
Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

**16 PEACE, JUSTICE AND STRONG INSTITUTIONS**  
Goal 16: Promote just, peaceful and inclusive societies

**17 PARTNERSHIPS FOR THE GOALS**  
Goal 17: Revitalize the global partnership for sustainable development

## HOW SUSTAINABLE BUILDINGS

**ACGSA's Strategy :**

- Sustainable Buildings for Everyone AND Everywhere
- Support Sustainable Development Goals to accelerate an inclusive, resilient and net zero built environment

**GOAL 8: Decent Work and Economic Growth**  
The construction of sustainable buildings and infrastructure can create jobs, retrain and upskill workers, enabling a just transition to a low-carbon economy.

**GOAL 9: Industry, Innovation and Infrastructure**  
Sustainable buildings and cities provide equitable and high-quality urban and regional infrastructure that promotes economic development, human welfare and cleaner operation as part of a circular economy.

**GOAL 12: Responsible Consumption and Production**  
Sustainable buildings are circular buildings that optimise resource use, result in zero waste to landfill, and support the regeneration of resources and natural systems.



**GOAL 7: Affordable and Clean Energy**  
Sustainable buildings provide access to affordable, reliable and clean energy by prioritising energy efficiency and low- or zero-carbon energy sources.

**GOAL 13: Climate Action**  
Considering the importance of the longevity of buildings, sustainable buildings support clean energy used efficiently, and sustainable cities work alongside individual buildings to decarbonise public resources and infrastructure, and incorporate future-proofing mechanisms to improve resilience and adaptation to future climatic change.

**GOAL 15: Life on Land**  
Sustainable buildings provide access to nature for everyone and enable nature-based solutions that enhance resilience and support biodiversity and ecosystem services.

**7 AFFORDABLE AND CLEAN ENERGY**

Ensure access to affordable, reliable sustainable and modern energy for all

**9 INDUSTRY INNOVATION AND INFRASTRUCTURE**

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

**11 SUSTAINABLE CITIES AND COMMUNITIES**

Make cities and human settlements inclusive, safe, resilient and sustainable

**15 LIFE ON LAND**

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss

**12 RESPONSIBLE CONSUMPTION AND PRODUCTION**

Ensure sustainable consumption and production patterns

**13 CLIMATE ACTION**

Take urgent action to combat climate change and its impacts

**17 PARTNERSHIPS FOR THE GOALS**

Only by working together can we achieve a sustainable and peaceful world!





# ACGSA 2024 ANNUAL REPORT

1<sup>st</sup> May 2024 – ASA Conference and ARCASIA 3<sup>rd</sup> OB/CC Meeting



Group photo of OB/CC 2024-25 at ASA event



ARCASIA Committee Chairs 2024-25  
From Right: Ar Joey (ACAE), Ar. Alice Leong (ACGSA), Ar. Debatosh (Fellowship), Ar. Emu (ACSR), Ar. Denny (ACYA) & Ar. Zhang Wei (ACPP)



ARCASIA Committee Chairs 2024-25  
From Right: Ar Joey (ACAE), Ar. Alice Leong (ACGSA), Ar. Debatosh (Fellowship), Ar. Emu (ACSR), Ar. Denny (ACYA) & Ar. Zhang Wei (ACPP)



# ACGSA 2024 ANNUAL REPORT

7<sup>th</sup> June 2024 – ACGSA Committee online meeting



ACGSA Chair called for the 1<sup>st</sup> online ACGSA committee meeting of 2024, on 7 June 2024. ACGSA Chair presented the overall key program of 2024-25, visions, proposed activities, the task force groups, and the detail of the up-coming 14<sup>th</sup> ACGSA Round Table Meeting which will be held on 4<sup>th</sup> July 2024 at KLCC, Kuala Lumpur, Malaysia hosted by PAM and coincided with KLAFF 2024. The main theme of the Round Table meeting had be presented which will relating to SDGs, ESGs and Low Carbon Emission. Committee proposed to relate the main theme with A.I. which also match with up-coming ACA Forum22 theme.



# ACGSA 2024 ANNUAL REPORT

4<sup>th</sup> July 2024 – 3<sup>rd</sup> ARCASIA OB/CC meeting



Group photo of OB/CC

# ACGSA 2024 ANNUAL REPORT

4<sup>th</sup> July 2024 – ACGSA 14<sup>th</sup> Round Table Meeting



## ARCASIA Committee on Green & Sustainable Architecture

2024, 14<sup>th</sup> ROUND TABLE MEETING @ KUALA LUMPUR, MALAYSIA  
4<sup>th</sup> July 2024, 14:00pm onwards (GMT+8:00)

**Theme:**  
**Integration of AI in architecture for Carbon Neutrality, aligning with Sustainable Development Goals (SDGs) and Environmental, Social, and Governance (ESG) criteria.**

"Innovative architecture merging AI for carbon-neutral future sustainability designs. To address climate change, artificial intelligence (AI) presents a promising avenue for innovative solutions. AI can be a great tool for driving zero / low carbon emissions; carbon neutrality and carbon capture storage as it can be used to enhance circularity by using data to assess how best to repurpose and reuse materials from buildings nearing the end of their lifecycle."



ACGSA REPORT for |  
44<sup>th</sup> COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA

# ACGSA 2024 ANNUAL REPORT

4<sup>th</sup> July 2024 – ACGSA 14<sup>th</sup> Round Table Meeting

NO.	PROGRAM	REPRESENTATIVE	TIME	DURATION
<b>Arrival of ACGSA Delegates</b>				
1	Welcome Address - Opening Remarks	AR. ALICE LEONG PEK LIAN, CHAIRMAN, Arcasia Committee on Green & Sustainable Architecture (ACGSA)	14:00-14:05	5 mins
2	Special Address by President- Arcasia	AR. SAFFUDDIN AHMAD, President ARC ASIA	14:05-14:10	5 mins
3	Special Address by PAM President	AR. ADRAINTA AZIZ, PAM President	14:10 - 14:15	5 mins
4	Photo session	All the members	14:15-14:20	5 mins
5	Introduction of Delegates	All the members	14:20-14:25	5 mins
6	Minutes of Last meeting Held at online dated 7 June 2024	To be Approved by All members	14:25-14:30	5 mins
7	Special Address	AR. TUSHAR SOGANI, Immediate Past Chair, ACGSA	14:30-14:35	5 mins
8	Special Address	AR. ACHARAWAN CHUTARAT, Past Chair, ACGSA	14:35-14:40	5 mins
9	Special Address	AR. DEBATOSH SAHU, Past Chair ACGSA	14:40-14:45	5 mins
10	Special Address	AR. QAZI ARIFF, Past Chair ACGSA	14:45-14:50	5 mins
11	Special Address on The Round Table Theme	AR. ALICE LEONG PEK LIAN, Chairman ACGSA	14:50-15:00	10 mins
<b>Presentation on the Theme "Integration of AI in architecture for Carbon Neutrality, aligning with Sustainable Development Goals (SDGs) and Environmental, Social, and Governance (ESG) criteria (4 minutes) &amp; Country Report (2 minutes) by Member Institutes"</b>				
12	AAM - Architects Association of Macau	AR. DONNA WU & AR. ZHENG JIAN YI (ONLINE)	15:00-15:06	4 mins + 2 mins per Member Institute
13	ASC - Architectural Society of China	AR. DR. HE JING (ONLINE)	15:06-15:12	4 mins + 2 mins per Member Institute
14	HKIA - The Hong Kong Institute of Architects	AR. TONY IP	15:12-15:18	4 mins + 2 mins per Member Institute
15	IIA - The Japan Institute of Architects	AR. TERUKAZU NI & VASANTH	15:18-15:24	4 mins + 2 mins per Member Institute
16	KIRA - Korea Institute of Registered Architects	AR. DO, KYU TAE (ONLINE)	15:24-15:30	4 mins + 2 mins per Member Institute
17	UMA - Union of Mongolian Architects	AR. TSOYGOODAVA A GANTUMUR (ONLINE)	15:30-15:36	4 mins + 2 mins per Member Institute

18	ASA - The Association of Siamese Architects under Royal Patronage	AR. AMORNUT DET-UDOMSAP	15:36-15:42	4 mins + 2 mins per Member Institute
19	IAI - Ikatan Arsitek Indonesia	YASERI DAHLIA APRITASARI	15:42-15:48	4 mins + 2 mins per Member Institute
<b>TEA BREAK while continuing meeting</b>				
20	PAM - Pertubuhan Akitek Malaysia	AR. SARLY SARKUM	15:48-15:54	4 mins + 2 mins per Member Institute
21	PUJA - Pertubuhan Ukur,量測及 Arkitek Brunei	AR. ZUL AMALI IDRIS	15:54 - 16:00	4 mins + 2 mins per Member Institute
22	SIA - Singapore Institute of Architects	AR TAN SZUE HANN	16:00- 16:06	4 mins + 2 mins per Member Institute
23	UAP - United Architects of the Philippines	AR. MA. CECILIA C. VIRAY (TBC)	16:06-16:12	4 mins + 2 mins per Member Institute
24	IIA - The Indian Institute of Architects	AR. GAURAV AGRAWAL	16:12-16:18	4 mins + 2 mins per Member Institute
25	SLIA - Sri Lanka Institute of Architects	AR. DAMITH PREMATHILAKE	16:18-16:24	4 mins + 2 mins per Member Institute
26	SONA - Society of Nepalese Architects	AR. RUCHI BAJRACHARYA (ONLINE) AR. SAKAR SHRESTHA (ONLINE)	16:24-16:30	4 mins + 2 mins per Member Institute
27	IAB - Institute of Architects Bangladesh	AR. SUJAUl ISLAM KHAN	16:30-16:36	4 mins + 2 mins per Member Institute
28	ZONE Representatives	RE-APPOINT / RETAIN	16:36-16:45	9 mins
A.ZONE A TO BE RE-APPOINT (PREVIOUS - AR. DR ZEBUN-JAR)				
B.ZONE B AR. TUAN-VAA				
C.ZONE C AR. DONNA WU -AAM				
29	Any other matter for Discussions	All the members	16:45-16:55	10 mins
30	Concluding Remarks	AR. ALICE LEONG PEK LIAN, CHAIR ACGSA	16:55 - 17:00	5 mins
<b>END MEETING &amp; PROCEED TO NETWORKING EVENT &amp; DINNER</b>				

ACGSA Round Table Meeting held on 4<sup>th</sup> July 2024 at KLCC, Kuala Lumpur Malaysia, hosted by PAM with the theme: "Integration of AI in architecture for Carbon Neutrality, aligning with Sustainable Development Goals (SDGs) and ESG criteria".

The Chairman presented her views related to the theme, followed by all countries' member reports and view and proposal relate to theme given. A recorded video had been taken and shared with all members committee and OB/CC.




**ARCASIA Committee on Green & Sustainable Architecture**

2024, 14<sup>th</sup> ROUND TABLE MEETING @ KUALA LUMPUR, MALAYSIA  
4<sup>th</sup> July 2024, 14:00pm onwards (GMT+8:00)

**Theme:**

**Integration of AI in architecture for Carbon Neutrality, aligning with Sustainable Development Goals (SDGs) and Environmental, Social, and Governance (ESG) criteria.**

"Innovative architecture merging AI for carbon-neutral future sustainability designs. To address climate change, artificial intelligence (AI) presents a promising avenue for innovative solutions. AI can be a great tool for driving zero / low carbon emissions; carbon neutrality and carbon capture storage as it can be used to enhance circularity by using data to assess how best to repurpose and reuse materials from buildings nearing the end of their lifecycle."




**ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE (ACGSA)**

4 JULY 2024

KUALA LUMPUR CONVENTION CENTRE, MALAYSIA

  
**Adjunct Prof. Ar. Adrianta Aziz**  
 President 2024/2025  
 Pertubuhan Akitek Malaysia (PAM)

  
**Ar. Saffuddin Ahmad**  
 President 2024/2025  
 Architects Regional Council Asia

  
**Ar. Alice Leong Pek Lian**  
 Chairman 2024/2025  
 Arcasia Committee on Green & Sustainable Architecture

























ACGSA REPORT for | 44<sup>th</sup> COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA



# ACGSA 2024 ANNUAL REPORT

4<sup>th</sup> July 2024 – ACGSA 14<sup>th</sup> Round Table Meeting

The image displays a grid of 37 presentation slides from the ACGSA 14th Round Table Meeting. The slides are numbered 1 through 37. Key slides include:

- Slide 1: Meeting Agenda No. 1: Chairman Welcome All Committee Members. AR. Alice Leong Pek Lian.
- Slide 2: Meeting Agenda No. 2: PAM President Special Remarks. AR. Adranta Aziz.
- Slide 3: Meeting Agenda No. 3: Group Photo Session.
- Slide 4: Meeting Agenda No. 4: Introduction of All ACGSA Delegates.
- Slide 5: Meeting Agenda No. 5: Approve on Minutes of ACGSA Meeting.
- Slide 6: Meeting Agenda No. 6: Special Address: IMM. Past Chair - Ar. Tushar Sodani.
- Slide 7: Meeting Agenda No. 7: Special Address: Past Chair - Ar. Achawan Chutarat.
- Slide 8: Meeting Agenda No. 8: Special Address: Past Chair - Ar. Debatosh Sahu.
- Slide 9: Meeting Agenda No. 9: Special Address: Past Chair - Ar. Qazirif.
- Slide 10: Meeting Agenda No. 10: Special Address on Round Table. Theme: Chairman - Ar. Alice Leong Pek Lian.
- Slide 11: PAM Presentation: ACGSA's Commitment to Green and Sustainable Architecture. AR. Alice Leong Pek Lian.
- Slide 12: ACGSA Presentation: To create architects becoming the leaders in the world of future sustainable development. THE AGENDA (A.I.C.C.): A - Addressing For Sustainable Development, B - Building Products & Sustainable Future, C - Climate Change in Energy Sector For Sustainable Future, D - Excellence Counting For Sustainable Future.
- Slide 13: Carbon Footprint of AI Technology. How can artificial intelligence help tackle climate change?
- Slide 14: Artificial Intelligence and climate change. Optimizing renewable energy, Enhancing energy efficiency, Reducing carbon emissions, Improving building design, Streamlining construction and operations, Enhancing customer management, Improving urban management and services.
- Slide 15: The Architect Intelligence to take in Carbon Neutrality. The challenges and opportunities for taking in carbon neutral, smartly, sustainably, innovatively, effectively and with work, maximizing value and success.
- Slide 16: The Architect Intelligence to take in Carbon Footprint. The availability of different tools and frameworks for carbon footprint calculation, including: Building, design, operation, and retrofit. BIM, digital twin, and other tools. The use of AI/ML in design, construction, and operation. The use of AI/ML in design, construction, and operation.
- Slide 17: ACGSA: Zero / Low Carbon Guidebook Tools' Frameworks.
- Slide 18: Zero / Low Carbon Guidebook Framework. The framework for zero/low carbon buildings, including: Design, construction, and operation. The use of AI/ML in design, construction, and operation.
- Slide 19: Common Carbon Metrics for Building Typologies.
- Slide 20: Building system. A table showing building system metrics.
- Slide 21: ACGSA: Competition. Proposed Theme: 1) Carbon Neutrality Architecture, 2) Better Green & Zero Carbon Passes for People.
- Slide 22: ACGSA's other programs. Review / upgrade the ACGSA Declaration, Strengthening core activities, To identify / establish with ACGSA's partners, further its goals in the built environment. (Note: The ACGSA has the strongest and the most active and effective role in the industry).
- Slide 23: CLOSED.
- Slide 24: Meeting Agenda No. 11: Countries' Presentation.
- Slide 25: Meeting Agenda No. 12: ACGSA President Opening Remarks. AR. Zaifuddin Ahmad.
- Slide 26: Meeting Agenda No. 12: Countries' Presentation (contd).
- Slide 27: Meeting Agenda No. 28: Zone Representative - Zone A, Zone B, Zone C.
- Slide 28: Meeting Agenda No. 29: Other Matters - Treasurer, USC.
- Slide 29: Meeting Agenda No. 30: Conclude Remarks - Chairman Ar. Alice Leong Pek Lian.
- Slide 30: Thank You. Thank you to all who have supported the ACGSA 14th Round Table Meeting. We hope you have enjoyed the meeting and the presentations.
- Slide 31: Meeting Agenda No. 30: Conclude Remarks - Chairman Ar. Alice Leong Pek Lian.
- Slide 32: Meeting Agenda No. 30: Conclude Remarks - Chairman Ar. Alice Leong Pek Lian.
- Slide 33: Meeting Agenda No. 30: Conclude Remarks - Chairman Ar. Alice Leong Pek Lian.
- Slide 34: Meeting Agenda No. 30: Conclude Remarks - Chairman Ar. Alice Leong Pek Lian.
- Slide 35: Meeting Agenda No. 30: Conclude Remarks - Chairman Ar. Alice Leong Pek Lian.
- Slide 36: Meeting Agenda No. 30: Conclude Remarks - Chairman Ar. Alice Leong Pek Lian.
- Slide 37: Meeting Agenda No. 30: Conclude Remarks - Chairman Ar. Alice Leong Pek Lian.

ACGSA Round Table Meeting held on 4<sup>th</sup> July 2024 at KLCC, Kuala Lumpur Malaysia, hosted by PAM with the theme: "Integration of AI in architecture for Carbon Neutrality, aligning with Sustainable Development Goals (SDGs) and ESG criteria". The ACGSA Chairman, Ar. Alice Leong Pek Lian, presented her views and direction related to the theme.



# ACGSA 2024 ANNUAL REPORT

4<sup>th</sup> July 2024 – ACGSA 14<sup>th</sup> Round Table Meeting



Group photo of ACGSA Committee members, 4<sup>th</sup> July 2024



Photo 1: ACGSA 14<sup>th</sup> Round Table Meeting, 4<sup>th</sup> July 2024



Photo 2: ACGSA 14<sup>th</sup> Round Table Meeting, 4<sup>th</sup> July 2024



# ACGSA 2024 ANNUAL REPORT

4<sup>th</sup> July 2024 – ACGSA 14<sup>th</sup> Round Table Meeting



Photo 3: ACGSA 14<sup>th</sup> Round Table Meeting, 4<sup>th</sup> July 2024



Photo 5: ACGSA 14<sup>th</sup> Round Table Meeting, 4<sup>th</sup> July 2024



Photo 4: ACGSA 14<sup>th</sup> Round Table Meeting, 4<sup>th</sup> July 2024



Photo 6: ACGSA 14<sup>th</sup> Round Table Meeting, 4<sup>th</sup> July 2024



ACGSA REPORT for | 44<sup>th</sup> COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA

# ACGSA 2024 ANNUAL REPORT

4<sup>th</sup> July 2024 – ACGSA 14<sup>th</sup> Round Table Meeting



Photo 7 & 8: ACGSA Committee attended Round Table Meeting via online on 4<sup>th</sup> July 2024

Photo 9: ACGSA Committee Group photo together with ARCASIA President at ACGSA 14<sup>th</sup> Round Table Meeting on 4<sup>th</sup> July 2024



Photo 10: PAM President delivered his welcome remarks in ACGSA 14<sup>th</sup> Round Table Meeting held in KLCC, Malaysia on 4<sup>th</sup> July 2024



Photo 11: Signing ceremony in ACGSA 14<sup>th</sup> Round Table Meeting held in KLCC, Malaysia on 4<sup>th</sup> July 2024



# ACGSA 2024 ANNUAL REPORT

4<sup>th</sup> July 2024 – ACGSA 14<sup>th</sup> Round Table Meeting

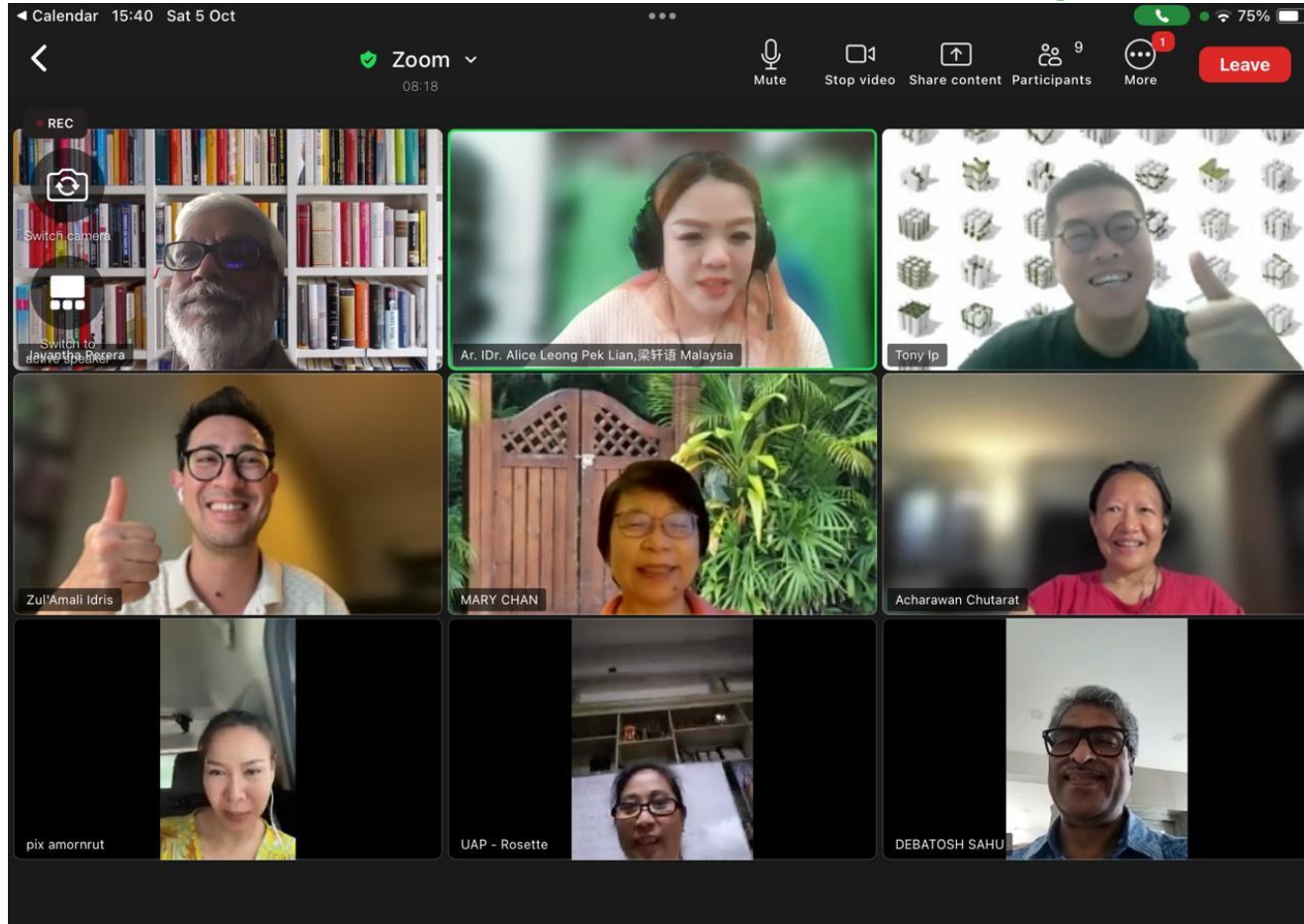


ACGSA 14<sup>th</sup> Round Table Meeting,  
Committee Members attended physically to Round Table 4<sup>th</sup>  
July 2024



# ACGSA 2024 ANNUAL REPORT

5<sup>th</sup> Oct 2024 – 2<sup>nd</sup> ACGSA committee online Meeting



ACGSA 14TH ACGSA ROUNDTABLE MEETING 4<sup>th</sup> July 2024

Meeting: 14th ACGSA Roundtable Meeting - 4th July 2024, Thursday  
 Date: 2:00pm-7:00pm  
 Venue: Lounge Hall 4 @ KLCC, Malaysia

Next Meeting: [Blank]  
 Date: [Blank]  
 Time: [Blank]  
 Venue: [Blank]

Notes by: ALPL

Chairman, Imm Past Chair, Past Chairs & Committee Members  
 Chairman: Ar. Alice Leong Pek Lian (ALPL)  
 Imm. Past Chair: Ar. Tushar Sogani (TS)  
 Past Chairman: Ar. Acharawan Chutarat (AC)  
 Past Chairman: Ar. Debatosh Sahu (DS)  
 Past Chairman: Ar. Gazi Arif (GA)  
 Committee: Ar. Donna Wu (AMM) - (Online) (DW)  
 Ar. Dr. He Jing (ASC) - (Online) (HJ)  
 Ar. Tony Ip (HKIA) (TI)  
 Ar. Teresakul Nii / Venanti (IA) (TNVA)  
 Ar. Do Kyu Tae (KIRA) - (Online) (DKT)  
 Ar. Amornrut Del Ubomrag (ASA) (AO)  
 Ar. Yasari Dalila Apritasari (IA) (YDA)  
 Ar. Sery Sarkum (PAM) (SS)  
 Ar. Zul'Amali (PLA) (ZAL)  
 Ar. Tan Sizze Hany (SIA) (THS)  
 Ar. Gaurav Agrawal (IA) (GA)  
 Ar. Sajid Islam Khan (IAB) (SIK)  
 Ar. Damin Premulathala (SLA) (DP)  
 Ar. Sagar Sreedatta (SOGAN) - (Online) (SS)  
 Observer: Ar. Michaela Rosette M. Santos-Tayang (MR) (Online)  
 Ar. Mary Chan (HKIA) - (Online) (MC)  
 Ar. Ansa Hui (PAM) (AH)  
 Ar. Jayantha Perera (SLIA) - (Online) (JP)  
 Ar. Ruchi Bagchiyaya (SOGAN) - (Online) (RB)

Attendee by invitation: [Blank]

Attachments: 1. Meeting Agenda, Task Force Group List & Country Reports (Link shared)

AGENDA	ACTION BY:
1.0 Convening of 14 <sup>th</sup> ACGSA Roundtable Committee Meeting	INFO
1.1 Open Remarks - ACGSA Chairman, Ar. Alice Leong Pek Lian	
1.2 Welcome Address - ACGSA President, Ar. Subodh Anand	
1.3 Special Deliver - Imm. Past Chair, Ar. Tushar Sogani	
1.4 Special Remarks: Past Chairs: <ul style="list-style-type: none"> <li>a. Ar. Acharawan Chutarat</li> <li>b. Ar. Debatosh Sahu</li> <li>c. Ar. Gazi Arif</li> </ul>	
1.5 Special Address - PAM President, Ar. Ardiana Aziz	

Prepared by: ACGSA Secretariat, KL Page 1 of 5

ACGSA 14TH ACGSA ROUNDTABLE MEETING 4<sup>th</sup> July 2024

AGENDA	ACTION BY:
2.0 Confirmation of Previous minutes of meeting no.91	INFO
1. Ar. Gaurav Agrawal - Approved	
2. Ar. Tony Ip - Seconded	
3.0 Agenda for the 14 <sup>th</sup> ACGSA Committee Roundtable Meeting	INFO
3.1 Reports from Zone A, B & C - Theme given & Country Reports	
3.2 Follow-Up on the taskforce group lead by Imm Past Chairs & Past Chairs of ACGSA progress	
3.3 Re-appointing Zones' Representatives	
3.4 Other Matters arising	
4.0 Reports from Zone A, B & C - Focusing on Integration of A.I. in Architecture for Carbon Neutrality, signing with SDGs and ESG & Country Reports. Country Reports will be shared via google link	INFO
5.0 Re-appointing Zone Representatives: <ul style="list-style-type: none"> <li>1. Zone A - Ar. Gaurav Agrawal (IA)</li> <li>2. Zone B - Ar. Amornrut Del Ubomrag (ASA)</li> <li>3. Zone C - Ar. Donna Wu (AMM)</li> </ul> - APL proposed to remain Ar. Donna Wu, committee agreed unanimously. The Zone Representatives shall play the roles to communicate with the committee members from respective zone and coordinating task assign and reporting back to taskforce group leaders and the Chairman.	INFO
6.0 ACGSA Taskforce Group 2024-2025 breaks down into 5 groups which will be led by the Immediate Past Chairman and 3 Past Chairman of ACGSA - Refer attachment. Committees are welcome to opt in their names in the group they would like to work on. <ul style="list-style-type: none"> <li>a) CA suggesting Chairman to work out the road map of the tasks and objectives for the 'St. Lucia, Colombia - ACA Forum 22'. CA suggested the green exhibition and newsletters to be led by the Past Chairs who had been and still doing the task e.g. Ar. Debatosh Sahu (DS) &amp; Ar. Tushar Sogani (TS). Ms. Rosette QA is seeking at least 1 committee from each zone to join his group working on the guideline. Chairman highlighted China is interested to join and they have a group of teams who are keen to assist.</li> <li>b) TS supports the guideline and it is important to implement it and bring to the country a policy maker to improve and push for the sustainability. SDGs, ESG etc for better future of architecture industry.</li> <li>c) DS highlighted that currently SONGA is working on SDGs focusing on "hunger" target is for homeless people and hope that to spread the knowledge to more student and young architects and SONGA hope that ACGSA could support financial matters. Meantime, SONGA hope ACGSA could conduct a webinar focusing on Green Certification Rating. Tools to enlighten SONGA as they are in the field of developing their own tools. Chairman taken notes and Past Chair Acha to look into this matter.</li> </ul>	On-Going
7.0 Others Matters arising from the committee	NL
8.0 Chairman concluded the meeting as follows: <ul style="list-style-type: none"> <li>a. ACGSA committee members to confirm the attendance of attending the ACA Forum 22 which will held in Colombo Sri Lanka in September 2024</li> <li>b. Urged committee to update the ACGSA Committee List 2024 especially country has not provided new representatives</li> <li>c. Proposing USA forum which will held in KL, Malaysia in November 2024</li> <li>d. Next Roundtable meeting - target to be held in Wuhan in March 2025 - TBC</li> </ul>	INFO

Meeting adjourned at 7pm (MYT)  
 Ar. Alice Leong Pek Lian  
 Chairman 2024-2025

Prepared by: ACGSA Chairman Page 2 of 5

A	B	C	D	E	F	G	H	I	J	K	
<b>ACGSA: Arcasia Committee on Green &amp; Sustainable Architecture 2024 / 2025 - TASKFORCE GROUP</b>											
<b>AR. ALICE LEONG PEK LIAN</b> <b>ACGSA CHAIRMAN</b>											
ZERO / LOW CARBON EMISSION : NEUTRALITY / CARBON CAPTURE			COMPETITION			NEWSLETTERS		RENEW / UPDATE DECLARATION		WEBINAR / TALKS	
LEAD BY: AR. QAZI ARIF (PAST CHAIR)			LEAD BY: AR. DEBATOSH SAHU (PAST CHAIR)			LEAD BY: AR. TUSHAR SOGANI (IMM. PAST CHAIR)		LEAD BY: AR. TUSHAR SOGANI (IMM. PAST CHAIR)		LEAD BY: AR. ACHARAWAN (PAST CHAIR)	
COMMITTEE: -			COMMITTEE:			COMMITTEE:		COMMITTEE:		COMMITTEE:	
1. Tony Ip - HKIA			1. Yasari Dalila Apritasari- IAI			1. Gaurav Agrawal - IIA		1		1. Tony Ip - HKIA	
2. Michaela Rosette M. Santos-Tayang			2. Ar. Zul'Amali Idris - Puja			2		2		2. Jayantha Perera - SLIA	
3. Mary Chan - HKIA			3. Jayantha Perera - SLIA							3. Amornrut - ASA	
4. Amornrut -ASA			4. Amornrut - ASA								
5. Jayantha Perera - SLIA			5								
6. Acharawan Chutarat - ASA											
7. He Jing - ASC											

ACGSA 2<sup>nd</sup> online meeting held on 5<sup>th</sup> October 2024. Committee discussed and updated on the task force group matters' status. ACGSA will held a webinar on next year February 2025, where each speaker will be from each zone to share about the Low Carbon Emission and Carbon Neutrality and relate to each country's green tool. Meantime, the next ACGSA Competition will be launch in next 2025 after the ACA Forum 22 held in Colombo, Sri Lanka.



ACGSA REPORT for | 44<sup>th</sup> COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA

# ACGSA 2024 ANNUAL REPORT

26 October 2024 – ARCASIA 4<sup>th</sup> OB/CC Meeting

ACGSA

2<sup>nd</sup> ACGSA COMMITTEE MEETING  
5<sup>th</sup> October 2024



Meeting : 2nd ACGSA Online Meeting  
Date : 4th October 2024, Friday  
Time : 5:00pm-6:00pm  
Venue : Zoom Online

Next Meeting :  
Date :  
Time :  
Venue :

Notes by : ALPL

Attendee: - (✓)

Chairman, Imm Past Chair, Past Chairs & Committee Members

Chair	Chairman	Ar. Alice Leong Pek Lian	(ALPL)	✓
	Imm Past Chair	Ar. Tushar Sogani	(TS)	✓
	Past Chairman	Ar. Achacurawan Chutarat	(AC)	✓
	Past Chairman	Ar. Debatosh Sahu	(DS)	✓
	Past Chairman	Ar. Qazi Arif	(QA)	✓
Committee		Ar. Donna Wu (AAM)	(DW)	✓
		Ar. Dr. He Jing (ASC)	(HJ)	✓
		Ar. Tony IP (HKIA)	(TIP)	✓
		Ar. Terukazu Nii / Vasanti (JIA)	(TNVA)	✓
		Ar. Do Kyu Tae (KIRA)	(DO)	✓
		Ar. Amornrut Det Udomsap (ASA)	(Pix)	✓
		Ar. Yaseri Dahlia Apritasari (IAI)	(YA)	✓
		Ar. Sarly Sarkum (PAM)	(SA)	✓
		Ar. Zul Idris (PUJA)	(ZI)	✓
		Ar. Tan Szeue Hann (SIA)	(TSH)	✓
		Ar. Gaurav Agrawal (IA)	(GA)	✓
		Ar. Sujaul Islam Khan (IAB)	(SIK)	✓
		Ar. Damith Premathilake (SLIA)	(DP)	✓
		Ar. Sakar Shrestha (SONA)	(SS)	✓
Observer		Ar. Michaela Rosette M. Santos-Tayag (UJAP)	(MR)	✓
		Ar. Mary Chan (HKIA)	(MC)	✓
		Ar. Axxu Hui (PAM)	(AH)	✓
		Ar. Jayantha Perera (SLIA)	(JP)	✓
		Ar. Ruchi Bajracharya (SONA)	(RB)	✓

Attendee by invitation  
- nil -

Attachments

1. Meeting Agenda, Task Force Group List & Country Reports (Link shared)

AGENDA	ACTION BY:
1.0 Convening of 2 <sup>nd</sup> ACGSA Committee Meeting	
Confirmation of Previous minutes of meeting no.01	INFO
1. Ar. Tan Szeue Hann – Approved 2. Ar. Achacurawan Chutarat – Seconded	

Prepared by ACGSA Chairman  
Page 1 of 3

ACGSA

2<sup>nd</sup> ACGSA COMMITTEE MEETING  
5<sup>th</sup> October 2024



AGENDA	ACTION BY:
2.0 Agenda for the 2nd ACGSA Committee Meeting	INFO
2.1 Taskforce group update: - • Number of committees join • Target frameworks from each task group	
3.0 Task Group 1 - Guidebook	QA
• Ar. Qazi Arif urged at least 1 committee member represent from each Zone to be involved. • As of the meeting China -Zone C has put in their participation. • Chairman encourage more committee to join this group as more information input the more comprehensive the guidebook will be and this guidebook will be very useful to be used by ARCASIA members to liaise with their country policy make as reference guide to push for SDGs Zero Carbon emission and carbon neutrality	
4.0 UIA Forum (November 2024) @ KL, Malaysia	ALPL
a) Ar. Qazi Arif proposed to have a small ACGSA committee meeting to further discuss the detail and progress for all the groups' taskforce. Chairman will discuss with PAM and update committee again.	
5.0 Task Group 5 – Webinar / Seminar Talks	AC
• Ar. Acha will arrange a webinar focusing on green tool certification relate to carbon neutrality, which was requested by SONA during the Roundtable meeting held on 4 <sup>th</sup> July 2024 to have a talk on green tool certification. • Target tentative the date shall be December 2024. • AC will propose the webinar theme • Speakers: - o Zone A – Ar. Jayantha – SLIA o Zone A - TBC o Zone B – Ar Tan Szeue Han o Zone B - PAM o Zone C – Ar. Tony IP o Zone C - TBC	
6.0 Task Group 2 – Competition	DS AC
• Ar. Debatosh Sahu will liaise with SLIA for sponsoring the competition event • Ar. Acha target the competition shall start by 1 <sup>st</sup> November 2024 to catch the SLIA ACA Forum in January 2025. Detail will be provide later	
7.0 Meeting adjourned at 6:15pm (MYT)	INFO

Ar. Alice Leong Pek Lian  
Chairman 2024-2025

Prepared by ACGSA Chairman  
Page 2 of 3

<p>ACGSA: Arcasia Committee on Green &amp; Sustainable Architecture 2024 / 2025 - TASKFORCE GROUP</p>										
<p>AR. ALICE LEONG PEK LIAN ACGSA CHAIRMAN</p>										
<p>ZERO / LOW CARBON EMISSION : NEUTRALITY / CARBON CAPTURE</p>		<p>COMPETITION</p>		<p>NEWSLETTERS</p>		<p>RENEW / UPDATE DECLARATION</p>		<p>WEBINAR / TALKS</p>		
<p>LEAD BY: AR. QAZI ARIF (PAST CHAIR)</p>		<p>LEAD BY: AR. DEBATOSH SAHU (PAST CHAIR) AR. ACHARAWAN (PAST CHAIR)</p>		<p>LEAD BY AR. TUSHAR SOGANI (IMM. PAST CHAIR)</p>		<p>LEAD BY AR. TUSHAR SOGANI (IMM. PAST CHAIR)</p>		<p>LEAD BY: AR. ACHARAWAN (PAST CHAIR)</p>		
<p>COMMITTEE: -</p>		<p>COMMITTEE:</p>		<p>COMMITTEE</p>		<p>COMMITTEE</p>		<p>COMMITTEE</p>		
<p>1. Tony Ip - HKIA 2. Michaela Rosette M. Santos-Tayag 3. Mary Chan - HKIA 4. Amornrut -ASA 5. Jayantha Perera - SLIA 6. Acharawan Chutarat - ASA</p>		<p>1. Yaseri Dahlia Apritasari- IAI 2. Ar. Zulf'Amali Idris - Puja 3. Jayantha Perera - SLIA 4. Amornrut - ASA 5 6.</p>		<p>1. Gaurav Agrawal - IIA 2</p>		<p>1 2</p>		<p>1 Tony Ip - HKIA 2. Jayantha Perera - SLIA 3. Amornrut -ASA</p>		

ACGSA chair presented her committee report updating on the status of the up-coming activities and matters discussed in the 2<sup>nd</sup> online committee meeting. Minutes of Meeting shown here.



ARCASIA Committee on Green & Sustainable Architecture  
**ARCASIA COMMITTEE ON  
GREEN & SUSTAINABLE  
ARCHITECTURE**



ACGSA REPORT for |  
44<sup>th</sup> COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA

# ACGSA UPDATE REPORT

GREEN AsiARCH2025

Exhibition of Green and Sustainable Practice of Architecture in Asia

14<sup>th</sup> January 2025 – Committee Meeting @ Colombo, Sri Lanka

**RAAJUKITIR**

Green AsiARCH - 06, 2024-25  
at  
Colombo, Sri Lanka

arcsasia Architects Regional Council Asia

ACGSA ARCHITECTS REGIONAL COUNCIL ASIA

**TENAGA NASIONAL Berhad**

**TNB PLATINUM**  
BANGSAR | KUALA LUMPUR | MALAYSIA

Country: Malaysia  
Name of Project: TNB Platinum  
Location: Bangsar, Kuala Lumpur  
Area: 13.62 Acres  
Built Area: 186,827 sqm  
Year of Completion: November 2023

**BRIEF DESCRIPTION**  
TNB Platinum is an expansion from TNB's existing sprawling campus consisting of its residential site and five stories of floor slabs for housing Corporate Campuses in line with TNB's original 2006 HQ office. The 186,827 sqm development is a collection of four office blocks, a main center and ancillary buildings that forms a complete ecosystem building various amenities within the landscaped grounds. The essence of design concept is to transcend the park design to a full-fledged local convention center - complete to the surrounding residential neighborhood and Pusat Hospital as the immediate vicinity.

**DESIGN CONCEPT**  
Envisioned as a sprawling campus, TNB Platinum represents the vision and ambition of Malaysia's largest electricity company for the new corporate headquarters. Built next to TNB's original 2006 HQ office, the 186,827 sqm development is a collection of four office blocks, a main center and ancillary buildings that forms a complete ecosystem building various amenities within the landscaped grounds. The essence of design concept is to transcend the park design to a full-fledged local convention center - complete to the surrounding residential neighborhood and Pusat Hospital as the immediate vicinity.

The project redefines the client's aspiration of a truly sustainable development, from landscape treatment and green walls that reduce heat and solar radiation to sun-path aligned solar wall, photovoltaic arrays and TNB's commitment status. It represents a commitment to people and environment not just in design but also in construction culture and overall development, marked by professional connectivity across disciplines.

**AWARDS**

- a. PAM Gold Awards 2023 – Commercial Highrise
- b. GBI Platinum Certified Building
- c. Gold Award – The Edge Malaysia
- ILAM Sustainable Landscape Award

Green AsiARCH - 06, 2024-25  
at  
Colombo, Sri Lanka

arcsasia Architects Regional Council Asia

PAM

ACGSA ARCHITECTS REGIONAL COUNCIL ASIA

**HD HYUNDAI GLOBAL R&D CENTER**

Green AsiARCH 2024-25  
at  
Colombo, Sri Lanka

arcsasia Architects Regional Council Asia

ACGSA ARCHITECTS REGIONAL COUNCIL ASIA



# ACGSA UPDATE REPORT

14<sup>th</sup> January 2025 – Committee Meeting @ Colombo, Sri Lanka

**Green AsiARCH 2024-25**  
at  
Colombo, Sri Lanka

**ACGSA**  
Architects Regional Council Asia

## HEADQUARTER OF COUNCIL OF ENGINEERS, THAILAND

**Project Information**

Country: Thailand  
Name of the Project: Headquarters of the Council of Engineers Thailand  
Location: Wang Thonglang, Bangkok  
Built Area: Approximately 13,000 sqm  
Year of Completion: 2022

**Awards:**

- AIA Architecture Design Award 2024
- iF DESIGN AWARD 2024
- TRUST IN Platform 2024

The Headquarters of the Council of Engineers Thailand, located in Bangkok's Lat Phah district, is a landmark building, completed in 2022. Designed by ACTTNA, the project serves as both an administrative hub and a community space, reflecting the engineering profession through its organic structural elements and innovative materials. The building incorporates extensive sustainability features, including energy-efficient systems, green roofs, and rainwater harvesting, achieving a Thai Green Building Institute certification. Functional zoning separates public and private spaces, ensuring accessibility and operational efficiency. Its open design, featuring public gardens and shared spaces, encourages community engagement, setting a new benchmark for urban public buildings.

**Designer:** ACTTNA Consortium  
**Conceptual Designer:** Jitvira Jitvira of Architects Architects Jitvira + Team SG  
**Landscape Designer:** J. J. J. Studio  
**Interior Designer:** Team SG  
**Structural Engineer:** Team Consulting & Management  
**Electrical & Telecommunications:** Promprant Technoarchitect  
**Fire Protection Engineers:** NovadInnovation  
**Mechanical Engineer:** NovadInnovation  
**Lighting Engineer:** Lighting studio  
**Green Building Design Consultant:** Green  
**Construction General Contractor:** Sam Multi Co.,  
**Construction Managers:** Sornthong Inter-  
**Automated parking system:** GPARK - Sornthong  
**TRUST consultant:** SMO-D  
**Photographer:** Sam Multi Co.

**Green AsiARCH - 06, 2024-25**  
at  
Colombo, Sri Lanka

**ACGSA**  
Architects Regional Council Asia

### GREEN PROCUREMENT & SUSTAINABLE MATERIAL

**ADOPTION OF PASSIVE DESIGN FOR BETTER LIFE CYCLE**

**REUSE REPLACE RECYCLE REDUCE REGIONAL RENEWABLE**

**RESILIENT DESIGN TO THE FUTURE**

**Simple Structure and Direct Building Services**

**Site-Respect Approach**

**Flexible Space**

**Green AsiARCH - 06, 2024-25**  
at  
Colombo, Sri Lanka

**ACGSA**  
Architects Regional Council Asia



# ACGSA UPDATE REPORT

14<sup>th</sup> January 2025 – Committee Meeting @ Colombo, Sri Lanka



**ACGSA**  
ARCASIA Committee on Green & Sustainable Architecture  
**ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE**



ACGSA REPORT for |  
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## List of Projects Submission for ACGSA Green AsiARCH 2024-25, ACA Forum 22 (14<sup>th</sup> - 18<sup>th</sup> Jan 2025) Colombo Sri Lanka

### INDIA (IIA) – (14 nos. boards)

1. **Forbes Marshall** : Ar. Christopher Charles Benninger - (Total 6 nos. A2 Size Boards)
2. **RaajKutir** : Ar. Vivek Singh Rathore, Ar. Anuradha Puri Rathore - (Total 8 nos. A2 Size Boards)

### THAILAND (ASA) – (12 nos. boards)

1. **Headquarter of Council of Engineers** : Ativich + Team SQ - (Total 6 nos. A2 Size Boards)
2. **DTGO Campus** : DT Design Corporation Limited - (Total 6 nos. A2 Size Boards)

### CHINA (ASC) – (4 nos. boards)

1. **Future Graden of Jiangsu Horticultural Expo Park** : Ar. Kau Cui & Ar. Fei Guan (China Architecture Design & Research Group Land-based Rationalism D.R.C) - (Total 2 nos. A2 Size Boards)
2. **Xiong'an Design Center** : Ar. Cuikai & Ar. Liuheng - (Total 2 nos. A2 Size Boards)

### Hong Kong (HKIA) – (12 nos. boards)

1. **Chung Chi Student Development at The Chinese University of Hong Kong** – Leigh & Orange Limited - (Total 6 nos. A2 Size Boards)
2. **Kwun Tung Balancing Tanks** – Alead - (Total 6 nos. A2 Size Boards)

### Bangladesh (IAB) – (4 nos. boards)

1. **Baral Biddya Niketan** : Ar. Iqbal Habib (Team Leader), Ar. Ishtiaque Zahir, Ar. Shahnaz Parvin (Total 2 nos. A2 Size Boards)
2. **Fakir Eco Knitwears Ltd** : Ar. Nahas Ahmed Khalil & Ar. Momanul Islam Emun (Total 2 nos. A2 Size Boards)

### Pakistan (IAP) – (14 nos. boards)

1. **Farmhouse 5A** : Ar. Suhail A. Abbasi & Ar. Fawad Suhail Abbasi; Company: Suhail & Fawad Architects - (Total 8 nos. A2 Size Boards)
2. **Qubeb** : Ar. Affan Ahmad & Ar. Dawar Zia & Ar. Muhammad Ali - (Total 6 nos. A2 Size Boards)

### Japan (JIA) – (12 nos. boards)

1. **Good Cycle Building 001** : Nori Architects + ASANUMA Inc - (Total 6 nos. A2 Size Boards)
2. **ONOJI Apartment Complex** : Ar. Takahiro Yamada (BIOFORM architectural design studio Co. Ltd); Ar. Michio Tase (PLAMTAGO Inc.); Ar. Masayuki Takagi (ARCHINOVA Ltd.); Ar. Akiko Kamata (Unittane inc.); Ar. Ryoko Yoshida (Yomoyama architect office); Ar. Yukako Ikebe (Ikebe Architects); Ar. Haruka Akiyama (KyotoGyoen National Garden) - (Total 6 nos. A2 Size Boards)

### South Korea (KIRA) – (1 no. board)

1. **HD Hyundai Global R&D Center** - Heerim Architects & Planners Co. Ltd. & NIKKEN SEKKEI LTD - (Total 1 no. A2 Size Boards)



### Malaysia (PAM) – (13 nos. boards)

1. **TNB Platinum Office Towers, Pelitawanis, and Childcare Centre** : Neuformation Architect Sdn Bhd in Collaboration with Woods Bagot - (Total 6 nos. A2 Size Boards)
2. **Merdeka 118** : Fender Katsalidis (Design Architect) & RSP Architects Sdn Bhd (Architect of Records) - (Total 7 nos. A2 Size Boards)

### Brunei (PUJA) – (7 nos. boards)

1. **Pantai Jerudong Specialist Centre – PJSC (Brunei Cancer Centre and Brunei Neuroscience Stroke Rehabilitation Centre)** : ARKITEK TING (Project Architect) & CIAP Architects Pte.Ltd. (Design Architect) - (Total 7 nos. A2 Size Boards)

### Singapore (SIA) – (13 nos. boards)

1. **Equatorial School of Architecture** : Ar. Erik L'Heureux FAIA, MSIA (CPG Consultants Pte Ltd) - (Total 7 nos. A2 Size Boards)
2. **GAIA : Tokyo Ito & Associates, Architects** (Design Architect) & RSP Architects Sdn Bhd (Local Architect) - (Total 6 nos. A2 Size Boards)

### Philippines (UAP) – (8 nos. boards)

1. **MACTAN International Airport** : Ar. Winston Shu (Integrated Design Associates (IDA) Ltd) (design architect) in collaboration with Budji + Royal - (Total 4 nos. A2 Size Boards)
2. **PARQAL** : Aedas (Design Architect) in collaboration with Visionarch (Local Architect) - (Total 4 nos. A2 Size Boards)

### Indonesia (IAI) – (4 nos. boards)

1. **JB Tower** – Ar. Budiman Hendropurnomo (DCM (Duta Cermat Mandiri) – (2 Nos. A2 Boards)
2. **Gran Rubina** – Ar. Tiyok Prasetyoadi & Ar. Archicha Danisworo (PDW (PT Pandega Desain Weharima) – (2 nos. A2 boards)

### Sri Lanka (SLIA)

**Overall 13 Countries Submitted**  
**Total = 118 nos. of A2 size boards**

Prepared by:  
**Ar. Alice Leong Pek Lian**  
Chairman, ACGSA  
Date: 10<sup>th</sup> Jan 2025

**Submission as of 10 January 2025**  
**13 Countries**  
**118 nos. boards**



**ACGSA**  
ARCASIA Committee on Green & Sustainable Architecture  
**ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE**



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**GREEN AsiARCH2025**

**Exhibition of Green and Sustainable Practice of Architecture in Asia**



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**ARCASIA Committee on Green & Sustainable Architecture**

**ACGSA COMMITTEE MEETING @ COLOMBO, SRI LANKA**

**14<sup>TH</sup> JANUARY 2025,**

**10:00am – 17:00 pm (GMT+8:00)**

**Theme:**

**Designing Sustainable Architecture with Artificial Intelligence (A.I)**



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ACGSA		ARCASIA Committee on Green & Sustainable Architecture, ACGSA COMMITTEE MEETING, at Colombo, Sri Lanka. Date: 14th January 2025, 10:00am (GMT+8:00)		arcasia Architects Regional Council Asia	
<b>Mission: Integrating AI Innovations for Achieving Carbon Neutrality: Advancements in Carbon Capture and Storage Technologies for a Sustainable Future</b>					
<b>Theme:</b> <b>Designing sustainable architecture with AI</b> "Embrace and involve the leveraging artificial intelligence to create environmentally-friendly buildings and urban spaces. AI tools analyze data related to energy efficiency, material usage, and environmental impact, enabling architects to make informed decisions that enhance sustainability. This approach optimizes designs for natural light, ventilation, and resource conservation while minimizing waste. By simulating various design scenarios, AI aids in achieving a balance between aesthetics and functionality, ultimately contributing to greener, more resilient architectural solutions for the future."					
NO.	PROGRAM	REPRESENTATIVE	TIME	DURATION	
<b>Arrival of ACGSA Delegates</b>					
		All ACGSA Delegates ARRIVE BEFORE 10:00	09:45-10:00	15 mins	
1	Welcome Address - Opening Remarks	AR. ALICE LEONG PEK LIAN, CHAIRMAN, Arcasia Committee on Green & Sustainable Architecture (ACGSA)	10:00-10:10	10 mins	
2	Special Address	AR. TUSHAR SOGANI, Immediate Past Chair, ACGSA	10:10-10:15	5 mins	
3	Special Address	AR. ACHARAWAN CHUTARAT, Past Chair, ACGSA	10:15-10:20	5 mins	
4	Special Address	AR. DEBATOSH SAHU, Past Chair ACGSA	10:20-10:25	5 mins	
5	Special Address	AR. QAZI ARIF, Past Chair ACGSA	10:25-10:30	5 mins	
6	Introduction of Delegates	All the members	10:30-10:45	15 mins	
7	Minutes of Last meeting Held at online dated 7 June 2024	To be Approved by All members	10:45-10:55	10 mins	
8	Chairman Presenting The Meeting Theme	AR. ALICE LEONG PEK LIAN, Chairman ACGSA	10:55-11:10	15 mins	
<b>Presentation on the Theme "Designing Sustainable Architecture with AI" (6 minutes) &amp; Country Report (4 minutes) by Member Institutes</b>					
9	IAB - Institute of Architects Bangladesh	AR. SAIDA MUMU	11:10-11:20	10 mins 6 mins + 4 mins per Member Institute	
10	ASA - The Association of Siamese Architects under Royal Patronage	AR. AMORNUT DET-UDOMSAP	11:20-11:30	10 mins 6 mins + 4 mins per Member Institute	
<b>Visit of ARCASIA OFFICE BEARERS (OBs) and SLIA President, 11:30AM - 11:45AM</b>					
11	Welcome Speech by SLIA President	AR. ROHANA BANDARA HERATH, SLIA President	11:30-11:36	6 mins	
12	Special Address by President- ARCASIA	AR. SAIFUDDIN AHMAD, President ARCASIA	11:36-11:42	6 mins	
13	Photo session	All the members	11:42-11:50	8 mins	
<b>Presentation on the Theme "Designing Sustainable Architecture with AI" (6 minutes) &amp; Country Report (4 minutes) by Member Institutes</b>					
14	JIA - The Japan Institute of Architects	AR. TERUKAZU NII + VASANTI (OBSERVER)	11:50-12:00	10 mins 6 mins + 4 mins per Member Institute	
15	IAP - Institute of Architects Pakistan	AR. MISHAEL MERCHANT	12:00-12:10	10 mins 6 mins + 4 mins per Member Institute	
16	IAI - Ikatan Arsitek Indonesia	AR. YASERI DAHLIA APRITASARI	12:10-12:20	10 mins 6 mins + 4 mins per Member Institute	
17	HKIA - The Hong Kong Institute of Architects	AR. TONY IP (ONLINE)	12:20-12:30	10 mins 6 mins + 4 mins per Member Institute	
18	IIA - The Indian Institute of Architects	AR. JYOTI PANSE	12:30-12:40	10 mins 6 mins + 4 mins per Member Institute	

PROCEED TO OPENING OF ARCASIA EXHIBITION (12:45PM) & LUNCH BREAK - 13:00PM - 14:00PM (1:00PM - 2:00PM)			
19	PAM - Pertubuhan Aktitek Malaysia	AR. SARLY SARKUM	14:00-14:10 10 mins 6 mins + 4 mins per Member Institute
20	KIRA - Korea Institute of Registered Architects	AR. DO, KYU TAE	14:10-14:20 10 mins 6 mins + 4 mins per Member Institute
21	SLIA - Sri Lanka Institute of Architects	AR. DAMITH PREMATHILAKE	14:20-14:30 10 mins 6 mins + 4 mins per Member Institute
22	PUJA - Pertubuhan Ukur, Jurutera & Arkitek Brunei	AR. ZUL' AMALI IDRIS	14:30-14:40 10 mins 6 mins + 4 mins per Member Institute
23	SONA - Society of Nepalese Architects	AR. SUSHMITA RANJIT SHRESTHA	14:40-14:50 10 mins 6 mins + 4 mins per Member Institute
24	SIA - Singapore Institute of Architects	AR. TAN SZUE HANN (ONLINE)	14:50-15:00 10 mins 6 mins + 4 mins per Member Institute
25	UAP - United Architects of the Philippines	AR. JOAN S. DE LEON-TABINAS	15:00-15:10 10 mins 6 mins + 4 mins per Member Institute
26	Discussion on Zero / Low Carbon Emissions: Carbon Neutrality & Carbon Capture Storage Guidebook	All the members	15:10-16:10 1 Hour
27	ACGSA DECLARATION	All the members	16:10-16:40 30 mins
28	ZONE Representatives	RE-APPOINTING - ZONE A Previous Representative - AR GAURAV AGRAWAL NEW REPRESENTATIVE :	16:40-16:45 5 mins
29	Any other matter for Discussions	All the members	16:45-16:55 10 mins
30	Conclude & Closing Remarks	AR. ALICE LEONG PEK LIAN- CHAIR ACGSA	16:55-17:00 5 mins
<b>END MEETING &amp; PROCEED TO OPENING EXHIBITION &amp; NETWORKING EVENT</b>			

OBSERVER : AR. MARY CHAN (OBSERVER) - ONLINE (HKIA)  
AR. JAYANTHA PERERA (OBSERVER) (SLIA)  
AR. AOXU HUI (OBSERVER) (PAM)  
Ar. Sakar Shrestha (SONA)  
Ar. Dr. Khurshid Zabin Hossain Taufique (IAB)



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**ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE**  
ACGSA CHAIRMAN



**ACGSA Committee Meeting**  
**Theme: Designing Sustainable Architecture with A.I**

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

**AR. IDR. ALICE LEONG PEK LIAN (PAM)**



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**SMART BUILDINGS**

Some components of a smart building include:

- The Internet of Things (IoT)
- Predictive analytics
- Open standards architecture
- App-enabled building services
- Intelligent building management system (iBMS)
- Sustainable buildings
- Actionable intelligence
- Smarter security

A smart building uses advanced technology to monitor and control building systems in real-time



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**TOP ARTIFICIAL INTELLIGENCE MODELS**  
TRANSFORMING INDUSTRIES

Artificial intelligence (AI) is the science of creating machines that can simulate human intelligence, such as the ability to learn, solve problems, and make decisions. AI can be used to create computer programs that can perform tasks that typically require human intelligence, such as language translation, visual perception, and decision making.

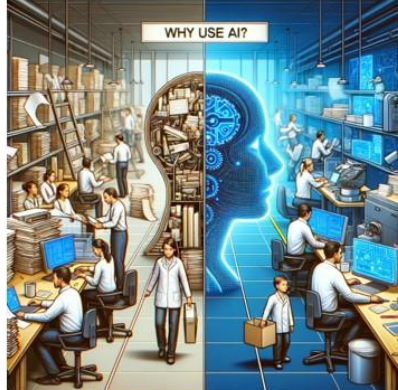


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**WHY USE AI?**




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**BECAUSE**


A.I enhances decision-making by analyzing vast amounts of data quickly and accurately, identifying patterns and insights that might be missed by humans.

This enables businesses to make more informed, data-driven decisions, improving efficiency, reducing errors, and ultimately leading to better outcomes.



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**ARTIFICIAL INTELLIGENCE (A.I) + (M.L) = DESIGN FUTURE SUSTAINABLE ARCHITECTURE**



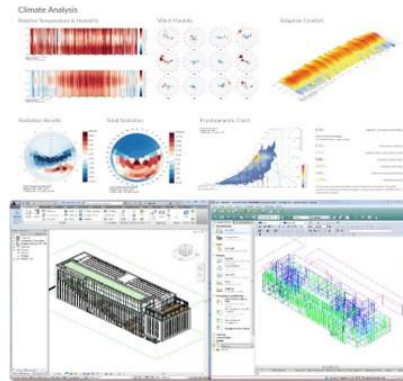
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## Artificial Intelligence (AI) and Machine Learning (ML)

- AI functions as a catalyst helping computers mimic human intelligence, making them think, learn, and make important decisions on the orders of a human.
- ML empowers computers to learn from data and experiences, gradually enhancing their intelligence over time.
- The collaboration of AI and ML equips architects with powerful tools to reimagine design processes and build ground-breaking structures.

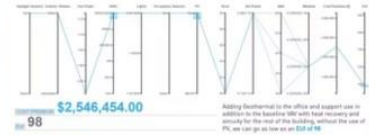


Artificial intelligence (AI) is used in Sustainable architecture to improve the design and construction process in many ways, including:

### Generative Design

- AI can help designers create more efficient, innovative, and creative solutions. AI can be used to:
- Generate 3D renderings and models
- Optimize material use
- Find new design trends and patterns
- Automate calculations like lighting simulation and energy consumption estimates
- Generate design mockups
- Refine presentation imagery
- Explore new visual ideas
- Create conceptual artwork, visualizations, and mood board

AI algorithms propose multiple design alternatives based on sustainability criteria, allowing architects to choose the most efficient and eco-friendly options



### Smart Urban Environments

- Explore the concept of generative design, where AI algorithms propose multiple design alternatives based on sustainability criteria, allowing architects to choose the most efficient and eco-friendly options
- Predictive maintenance of building systems using IoT sensors and AI algorithms

### Sustainability

- AI can help make buildings more sustainable by:
- Analyzing environmental data
- Recommending sustainable materials and practices

### Cost efficiency

- AI can help improve cost efficiency by:
- Optimizing resource allocation
- Reducing material waste
- Streamlining project timelines

### Performance monitoring

- AI can help monitor project and building performance in real time. AI can help identify potential roadblocks and areas of improvement.

### Some examples of AI tools for architects include:

#### Leonardo Ai

- AI architecture tools that can generate design mockups, refine presentation imagery, and explore new visual ideas
- AI-powered software can aid architects in creating efficient building designs that maximize natural light and ventilation while minimizing energy consumption

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### TestFit

- An AI-powered building configurator that can help architects design and analyze buildings quickly

### Midjourney

- An AI tool that can generate highly detailed and imaginative visual content from textual descriptions
- improve visualization techniques for design collaboration among architects, engineers, and stakeholders, allowing for a more integrated approach to sustainable architecture



AI helps architects make informed decisions based on data-driven insights. Revolutionizing planning, design, and construction with AI-driven technologies.

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**Urban Forms**

- Socio-economic**: Living number, IT availability, Household number, employment rate
- Density**: Compactness, Complexity, Centrality, Porosity
- Energy**: Domestic, Industrial, Commercial, mobility
- Climate**: Heating, Cooling, LST, UHI, NDVI
- Mobility**: Bike / Walking, Self transport, Bus/Train, carpooling
- Pollution**: CO2, PM10, PM2.5, NO3, noise

- Resilience and Climate Adaptation
- Urban Design and Morphology
- Infrastructure Planning
- Community Engagement
- Intelligent traffic management, traffic light control, or camera surveillance.
- Identify, map, and measure the amount of carbon that trees in a specific area can store; takes into account their species, geometric shape, and leaf volume. For example, the researchers could measure that trees in specific areas are retaining how many thousand tons of carbon, pinpointing the specific characteristics of the effectiveness of certain species and where particular types of trees would be most beneficial, aiding in the effective incorporation of vegetation within urban centers.

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**THANK YOU**

**arcasia**  
Architects Regional Council Asia

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## ACGSA Committee Meeting Proposed Declaration 2025

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



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## Proposed ACGSA Declaration 2025 for Zero Carbon Emission, Carbon Neutrality, and Carbon Capture Storage in Sustainable Architecture

We, the undersigned architects of ACGSA .... in the field of sustainable design, recognize the urgent need for action against climate change. Our profession has a significant impact on the environment, and we commit to advancing practices that lead to a sustainable future.

### Declaration

#### 1. Commitment to Zero Carbon Emission

We declare our commitment to designing and constructing buildings that achieve zero carbon emissions. This includes minimizing energy consumption, utilizing renewable energy sources, and embracing innovative technologies to eliminate carbon output throughout the lifecycle of our projects.

#### 2. Carbon Neutrality Goals

We pledge to strive for carbon neutrality in all our architectural practices. This entails measuring our carbon footprint, implementing strategies for reduction, and offsetting any unavoidable emissions through verified programs, such as reforestation, renewable energy projects, and community investments.

#### 3. Implementation of Carbon Capture and Storage (CCS)

We advocate for the integration of carbon capture and storage technologies in both new and existing buildings. We recognize the role that these technologies play in mitigating greenhouse gas emissions and are dedicated to supporting research and development efforts in this field to enhance effectiveness and accessibility.

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## 4. Education and Advocacy

We commit to educating our clients, communities, and peers on the importance of sustainable architecture. By sharing knowledge and best practices, we aim to foster a culture of sustainability, encouraging the adoption of environmentally responsible design principles.

## 5. Collaboration for Innovation

We understand the importance of collaboration with scientists, policymakers, and other industries to advance the goals of zero carbon emissions and carbon neutrality. We pledge to work together to promote policies and incentives that support the transition to sustainable practices.

## 6. Long-term Vision

We envision a future where sustainable architecture is the norm, leading to thriving ecosystems and resilient communities. We are dedicated to creating spaces that not only meet current needs but also enhance the quality of life for future generations.

## Conclusion

By signing this declaration, we affirm our dedication to combating climate change through sustainable architectural practices. Together, we can shape a built environment that honors our planet and inspires a brighter, more sustainable future.

Signatures

[ALL ACGSA Committee Members]

Date

[Today's Date: 01/13/2025]



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## ACGSA Committee Meeting Proposed Guidebook Frameworks & Details “Zero/Low Carbon, Carbon Neutrality & Carbon Capture Storage For Sustainable Architecture”

ACGSA CHAIRMAN



AR. IDR. ALICE LEONG PEK LIAN (PAM)

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



LEGACY



OVERALL /  
INCLUSIVITY



VISIBILITY



ENVIRONMENT

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LEGACY



OVERALL /  
INCLUSIVITY



VISIBILITY



ENVIRONMENT

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ACGSA CHAIRMAN

ACGSA Committee Meeting  
Proposed Guidebook Frameworks & Details  
"Zero/Low Carbon, Carbon Neutrality & Carbon Capture Storage For Sustainable Architecture"

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

AR. IDR. ALICE LEONG PEK LIAN (PAM)

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Proposed ACGSA Guidebook Framework for Zero/Low Carbon Emission & Carbon Neutrality in Sustainable Architecture

Table of Contents

1. Introduction

2. Understanding Carbon Emissions

3. Principles of Sustainable Architecture

4. Zero/Low Carbon Emission Strategies

5. Achieving Carbon Neutrality

6. Carbon Capture and Storage (CCS)

7. Regulatory and Policy Framework

8. Design Case Studies

9. Tools and Resources

10. Conclusion

11. Appendices

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6. Carbon Capture and Storage (CCS)

a. Overview of CCS Technologies

b. Implementation Practices in Architecture

c. Case Studies of Successful CCS Integration

7. Regulatory and Policy Framework

a. Overview of Relevant Legislation

b. Incentives for Low Carbon Projects

c. Role of Certifications (e.g., GBI, LEED, BREEAM)

8. Design Case Studies

a. Examples of Zero/Low Carbon Buildings

b. Analysis of Design Strategies and Outcomes

c. Lessons Learned

9. Tools and Resources

a. Design Software for Sustainable Architecture

b. Resources for Research and Continuing Education

c. Organizations and Networks for Collaboration

10. Conclusion

a. Recap of Key Takeaways

b. Call to Action for Architects and Stakeholders

11. Appendices

I. Glossary of Terms

II. Recommended Further Reading

III. Contact Information for Support and Collaboration

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Detailed Guidelines for Each Section

1. Introduction

- Explain how the guidebook aims to support architects and developers in incorporating sustainable practices into their projects.

2. Understanding Carbon Emissions

- Provide a background on carbon emissions, including how they are generated by buildings and infrastructure.

3. Principles of Sustainable Architecture

- Describe the holistic approach to design, integrating environmental, social, and economic factors.

4. Zero/Low Carbon Emission Strategies

- Offer actionable strategies that can be immediately applied in design processes.

5. Achieving Carbon Neutrality

- Outline the importance of measuring and understanding emissions in order to effectively target reductions and offsets.

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6. Carbon Capture and Storage (CCS)

- Discuss innovative technologies and approaches that can be employed, along with their practical applications and benefits.

7. Regulatory and Policy Framework

- Summarize legislative and policy frameworks that support low carbon initiatives and ways to navigate these.

8. Design Case Studies

- Present diverse examples that showcase practical application of the guide's principles.

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9. Tools and Resources

- List commonly used tools and resources to assist in implementing the guide's strategies.

10. Conclusion

- Encourage ongoing commitment to sustainable architecture and innovation in design practices.

11. Appendices

- Provide additional resources to deepen understanding and facilitate ongoing learning.

This framework can serve as a comprehensive guide to promote and implement zero/low carbon emission and carbon neutrality principles in sustainable architecture.

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THANK YOU

ARCASIA FORUM 22

ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE

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TARGET TO E-LAUNCH THE E-BOOK BY END 2025



# ACGSA UPDATE REPORT

14<sup>th</sup> January 2025 – Committee Meeting @ Colombo, Sri Lanka

A	B	C	D	E	F	G	H	I	J	K		
			<b>ACGSA: Arcasia Committee on Green &amp; Sustainable Architecture 2024 / 2025 - TASKFORCE GROUP</b>									
<b>AR. ALICE LEONG PEK LIAN ACGSA CHAIRMAN</b>												
<div style="border: 2px dashed red; padding: 5px;"> <p style="color: red; font-weight: bold; text-align: center;">TARGET TO E-LAUNCH THE E-BOOK BY END 2025</p> </div>			<b>ZERO / LOW CARBON EMISSION : NEUTRALITY / CARBON CAPTURE</b>		<b>COMPETITION</b>		<b>NEWSLETTERS</b>		<b>RENEW / UPDATE DECLARATION</b>		<b>WEBINAR / TALKS</b>	
			<b>LEAD BY:</b> AR. QAZI ARIF (PAST CHAIR)		<b>LEAD BY:</b> AR. DEBATOSH SAHU (PAST CHAIR) AR. ACHARAWAN (PAST CHAIR)		<b>LEAD BY</b> AR. TUSHAR SOGANI (IMM. PAST CHAIR)		<b>LEAD BY</b> AR. TUSHAR SOGANI (IMM. PAST CHAIR)		<b>LEAD BY:</b> AR. ACHARAWAN (PAST CHAIR)	
			<b>COMMITTEE: -</b>		<b>COMMITTEE:</b>		<b>COMMITTEE</b>		<b>COMMITTEE</b>		<b>COMMITTEE</b>	
			1. Tony Ip - HKIA 2. Michaela Rosette M. Santos-Tayag 3. Mary Chan - HKIA 4. Amornrut -ASA 5. Jayantha Perera - SLIA 6. Acharawan Chutarat - ASA		1. Yaseri Dahlia Apritasari- IAI 2. Ar. Zul'Amali Idris - Puja 3. Jayantha Perera - SLIA 4. Amornrut - ASA 5.		1. Gaurav Agrawal - IIA 2.		1 2		1. Tony Ip - HKIA 2. Jayantha Perera - SLIA 3. Amornrut -ASA	

LEAD BY ACGSA CHAIRMAN - AR. ALICE LEONG (PAM) & AR. QAZI ARIF ((PAST CHAIRMAN ACGSA) (IAB)

1. ZONE A – AR. TUSHAR SOGANI (IMMEDIATE PAST CHAIRMAN ACGSA) (IIA)
2. ZONE B – AR. AMORNRUT DETUDOMSAP (ASA)
3. ZONE C – AR. TONY IP (HKIA)

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**ACGSA**  
ARCASIA Committee on Green & Sustainable Architecture  
**ARCASIA COMMITTEE ON  
GREEN & SUSTAINABLE  
ARCHITECTURE**



**ACGSA REPORT for |**  
**44<sup>th</sup> COUNCIL MEETING | 15 & 16 January 2025 | Colombo, SRI LANKA**

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## Certificate of Appreciation

This certificate is presented to

**Ar. Dr Tony Ip Chung Man**

for attending the

**ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE (ACGSA) COMMITTEE MEETING**

Theme: Designing Sustainable Architecture with A.I.

held on

**14 JANUARY 2025  
BANDARANAIKE MEMORIAL INTERNATIONAL CONFERENCE HALL (BMICH)  
COLOMBO, SRI LANKA**

**Ar. Alice Leong Pek Lian**  
Chairman,  
ARCASIA Committee on Green & Sustainable Architecture (ACGSA)



## Certificate of Appreciation

This certificate is presented to

**Ar. Sakar Shrestha**

for attending the

**ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE (ACGSA) COMMITTEE MEETING**

Theme: Designing Sustainable Architecture with A.I.

held on

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COLOMBO, SRI LANKA**

**Ar. Alice Leong Pek Lian**  
Chairman,  
ARCASIA Committee on Green & Sustainable Architecture (ACGSA)



## Certificate of Appreciation

This certificate is presented to

**Ar. Tan Szue Hann**

for attending the

**ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE (ACGSA) COMMITTEE MEETING**

Theme: Designing Sustainable Architecture with A.I.

held on

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COLOMBO, SRI LANKA**

**Ar. Alice Leong Pek Lian**  
Chairman,  
ARCASIA Committee on Green & Sustainable Architecture (ACGSA)



## Certificate of Appreciation

This certificate is presented to

**Ar. Mary Chan**

for attending the

**ARCASIA COMMITTEE ON GREEN & SUSTAINABLE ARCHITECTURE (ACGSA) COMMITTEE MEETING**

Theme: Designing Sustainable Architecture with A.I.

held on

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COLOMBO, SRI LANKA**

**Ar. Alice Leong Pek Lian**  
Chairman,  
ARCASIA Committee on Green & Sustainable Architecture (ACGSA)



# END ACGSA ANNUAL REPORT 2024 & THANK YOU



**ACGSA**  
ARCASIA COMMITTEE ON  
GREEN & SUSTAINABLE  
ARCHITECTURE



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