2025 APIGBA Awards
Excellent Intelligent Green Building Projects and Systems Awards
Submission and Assessment Guidelines

APIGBA (Asia Pacific Intelligent Green Building Alliance) was established in April 2014 to provide the intelligent green building technology with an academic and technology exchange platform in the Asia Pacific region, with the objective of promoting safety, health, convenience, comfort, energy efficiency and sustainable environment for people living in the region.

The "APIGBA Excellent Intelligent Green Building Project Award" and "APIGBA Excellent Intelligent Green Building System Award" are presented biennially to inspire the innovative development of building projects and systems with the advancement of information and communication technologies. Through these means, building and its associated industries in the region will move forward, commensurate with the counterparts worldwide.

1. ENTRANTS QUALIFICATIONS

Entrants for the Awards should meet one of the following qualifications:

1. Buildings designed based on the concept of intelligent green building.
2. Existing buildings renovated with intelligent green building techniques.
3. Intelligent green building systems implemented on the buildings of (1) or (2).
4. Buildings total floor area must be exceed 2000 m^2.
5. Entrants apply for Excellent Intelligent Green Building Performance Award should apply data in building operation profile and the building must be operated more than one year.

2. TYPES OF AWARDS

Depending on the attributes of entrants, the Awards are classified into four types:

1. Excellent Intelligent Green Building **DESIGN** Award
2. Excellent Intelligent Green Building **PERFORMANCE** Award
3. Excellent Intelligent Green Building **RENOVATION** Award
4. Excellent Intelligent Green Building **SYSTEM** Award

3. ASSESSMENT

1. The assessment will be processed in three stages (Table 1):

   1st stage: each APIGBA country/region member accepts submissions from entrants and recommends a short list of no more than 8 candidates for each Excellent Intelligent Green Building Award (i.e., Design, Performance, and Renovation types) and no more than 5 candidates for Excellent Intelligent Green Building System Award to the host APIGBA member.

   2nd stage: Judging committee selects 5 semi-finalists of each Excellent Intelligent Green Building Awards and 5 semi-finalists of Excellent Intelligent Green Building System Award from the short list for the final contest in the APIGBA assembly.

   Final stage: All semi-finalists will make oral presentation in the APIGBA assembly. Judging committee will make the final judgment after presentation.

2. Entrants apply for Excellent Intelligent Green Building System Award should have been implemented in one of the entrants for Excellent Intelligent Green Building Award.

3. Each APIGBA member shall nominate 2 eligible judges with professional background in Intelligent Green Building to form the Judging Committee. The mission of Judging Committee is to select the excellent building projects and systems from the recommended submissions.

Table 1 Number of recommended submissions at different assessment stages of APIGBA Awards

	Design award	Performance award	Renovation award	System award
[First Stage] Recommended by each APIGBA member	≦8	≦8	≦8	≦5
[Second Stage] Recommended by Judging Committee	5	5	5	5
[Final Stage]	Semi-finalists will make oral presentation in the APIGBA assembly. Judging committee will make the final judgment after presentation.			

4. CONTENTS OF SUBMISSION MATERIAL

1. All submission material must be in English and submitted to the local APIGBA member before deadline. Entrant should submit 15 hard copies of application material and an electronic copy (in PDF format). The contents of the submission shall not exceed 60 pages (in A4 size) including the appendices.
2. The submission material should include, but not limited, the followings listed in Table 2.

Table 2 Suggested contents of submission

	Design Award	Performance Award	Renovation Award	System Award
1. General information of submission	ˇ	ˇ	ˇ	ˇ
2. Highlights of intelligent green building design				
2-1 Design concept of IGB	ˇ	ˇ	ˇ	ˇ
2-2 Innovation of intelligent green technology	ˇ	ˇ	ˇ	ˇ
2-3 Operation Performance	-	ˇ	ˇ	△
2-4 Prospective performance	ˇ	ˇ	ˇ	ˇ
3. Sharing of best practice	-	ˇ	ˇ	ˇ
4. Public engagement and education	-	ˇ	ˇ	△

ˇ : Compulsory △: Optional

5. REGISTRATION FEE

1. There is a **USD $1000 or MOP 8000 registration fee** for each project submitted in a category.
2. Registration fee(s) must be received no later than on **July 30, 2025**, for the application to be considered.
3. Payment Method:

Payee Name:	CHINA GREEN BUILDING AND ENERGY SAVING (MACAU) ASSOCIATION
Payee Address:	Av. da Amizade Nº 918, World Trade Centre Macau, 7 andar B-C, Macau
Bank Name:	BANK OF CHINA , MACAU BRANCH
Bank Account Number:	180188102275056 (USD)
	01-01-10-419950 (MOP)
SWIFT Code:	BKCHMOMX
Bank Address:	Avenida Doutor Mario Soares, Bank of China Building, Macau

*3 free seats will be offered to each project team for both welcome dinner and ceremony lunch on 16th Oct 2025 and 17th Oct 2025.

6. TIME FRAME

The 2025 APIGBA awards competition will be hosted by APIGBA-Macau and the time frame is as follows:

Table 3 Time frame of 2025 APIGBA Awards

Time	Contents	In charge
~2024/08/30	**Start first stage assessment process within each APIGBA country/region**	**Each Country /Region**
~2024/12/11	**Each APIGBA country/region member nominates 2 eligible judges to form the Judging Committee of the Awards**	**Each Country /Region**
~2025/01/31	**Recommend no more than 8 candidates for each Excellent Intelligent Green Building Award and no more than 5 for Excellent Intelligent Green Building System Award to the host APIGBA member. For this action, send the full data of the candidates to the APIGBA-Macau chapter.**	**Each Country /Region**
~2025/03/31	**Judging committee selects 5 semi-finalists of each Excellent Intelligent Green Building Awards and 5 semi-finalists of Excellent Intelligent Green Building System Award from the short list for the final contest in 2025 APIGBA assembly.**	**APIGBA- Macau**
~2025/07/31	**APIGBA announces the semi-finalists for the Awards.**	**APIGBA- Macau**
2025/10/16	**Semi-finalists shall make oral presentation in the APIGBA assembly. Judging committee will make the final judgment after presentation.**	**APIGBA-Macau**

7. CONTACT INFORMATION

Host APIGBA member：APIGBA-Macao (China Green Building and Energy Saving (Macau) Association)
Address: Av. da Amizade Nº 918, World Trade Centre Macau, 7 andar B-C, MacauContact: Ms. Fiona / Secretary,
T: +853-2881-1999, F: +853-2881-0202
E: info@chinagbc-macau.org
U: https://www.chinagbc-macau.org/

Excellent Intelligent Green Building Projects and Systems Awards

List of forms

#1 Application Form

#2 Building Information Form

#3 Intelligent Green Building Profile

#4 Systems/Equipment Information

#5 Self - evaluation list

#6 Operational Data Sheet

#7 Sharing of Best Practice

#8 Public Engagement and Education

#1 Application Form

☐Design Award ☐ Performance Award ☐ Renovation Award ☐ System Award

1. Basic			
Building name		Please upload building picture.	
Address			
Category	□ Office □ Residential □ Commercial □ Hotel □ Industrial □ Education □ Hospital & nursing □ Public □ Others_____		
Ownership	□ Public own □ Private own		
Intelligent/Green Building Certification	Certification		Grade
2. Site Information			
Site area		m^2	Construction Floor Area (CFA)	m^2
BCR (Building Coverage Ratio)	CFA / Site area		
Name of Applicant:			
Position:			
Affiliation:			
Capacity: e.g. owner, architects, facility manager, etc (consent must be obtained if not owner)			
Signature:	Date of submission:		

#2 Building Information Form

Building name	
Owner	
Architects	
General Contractor	
Construction commencement date	
Building use permit issued date	
Number of floors	Above ground: Basement levels:
Structure type	
Site area	m^2
Total Construction Floor Area (CFA)	m^2
Building height	m
Height per floor (STD floor)	m
Facility managed by	□ owner □ outsourcing

Note:

Items	Designers	Contractors
Architecture design		
Structure design		
HVAC system		
Electrical system		
BMS / EMS		
Water services		
Elevator/Escalator		
Fire safety system		
ICT and e-Services		
Other:		

#3 Intelligent Green Building Profile

☐Intelligent Green Building Project ☐Intelligent Green Building System

Design Objective & Concept:
Innovative Intelligent Green Techniques Highlights
Operation Maintenance & Management Benefits
Prospective Achieved Benefits

#4 System/Equipment Information

System/Equipment		Information
Security	Fire alarm	
	Access Control	
	Video Surveillance	
	Parking Management	
	Elevator/escalator	
Health & Comfort	Environmental Monitoring	
	Care/Convenient Living	
Energy	Electrical	
	HVAC	
	Lighting	
	Plumbing	
	Renewable Energy	
	Heat Pump	
	Smart Meters	
Management platform	Smart Home	
	EMS	
	Property Management	
	Central Monitoring	
Others		

#5 Self-evaluation List

		Design Award	Performance Award	Renovation Award	System Award
Security	Auto-fire alarm	1. Function well designed? 2. Advance technology used? 3. Target	1. Function well designed? 2. Advance technology used? 3. Performance vs Target 4. users response	1. Function well designed? 2. Advance technology used? 3. Performance improved? 4. users response	1. Function well designed? 2. Advance technology used? 3. Performance improved? 4. users response
	Video Surveillance				
	Access control				
	Anti-theft alarm				
	Others				
Health & Comfort	Environmental status monitoring & control	1. Function well designed? 2. Advance technology used? 3. Target	1. Function well designed? 2. Advance technology used? 3. Performance vs Target 4. users response	1. Function well designed? 2. Advance technology used? 3. Performance improved? 4. users response	1. Function well designed? 2. Advance technology used? 3. Performance improved? 4. users response
	Health care facility				
	Health living service				
	Convenient living service				
	Others				
Energy Saving	Energy consumption monitoring system	1. Function well designed? 2. Advance technology used? 3. Target	1. Function well designed? 2. Advance technology used? 3. Performance vs Target 4. users response	1. Function well designed? 2. Advance technology used? 3. Performance improved? 4. users response	1. Function well designed? 2. Advance technology used? 3. Performance improved? 4. users response
	Energy management system				
	Monitoring and management of energy efficiency				
	Others				
Cost	Reduce labor costs	Target	Performance vs Target	Performance vs Target	Performance vs Target
	Reduce operation costs				
	Increase operation efficiency				
	Others				
Management	Building Intelligent	1. Function well designed? 2. Advance technology used? 3. Target	1. Function well designed? 2. Advance technology used? 3. Performance vs Target 4. users response	1. Function well designed? 2. Advance technology used? 3. Performance improved? 4. users response	1. Function well designed? 2. Advance technology used? 3. Performance improved? 4. users response
	Property Management				
	Facility management				
	Others				

(Innovative Techniques are Option for Bonus)

Item	Innovative Techniques	Design Award	Performance and Design Award	Renovation Award
1	Green BIM Energy Saving Design	Using BIM technology during the design phase for building energy consumption simulation or related green building performance analysis, comparing quantified energy-saving data from different schemes, and providing design feedback to optimize the design		Using BIM technology during the design phase for building energy consumption simulation or related green building performance analysis, comparing quantified energy-saving data from different schemes, and providing design feedback to optimize the design
2	BIM integrated with FM or BAS in order to optimize operation management efficiency		Utilizing the BIM as-built model to integrate Facility Management (FM) or Building Automation Systems (BAS) to achieve one of the following functions: 1, Integrating 3D visualization models with property management platform for equipment maintenance, asset management, repair management, and assisting in troubleshooting and equipment addressing. This accomplishes a bidirectional data management function, allowing information to be retrieved through graphics and vice versa. 2, Using 3D visualization models to interface with Building Automation (BA) operational information. Building managers can, through a web platform, grasp real-time operational status or query historical operational records.	
3	The data application employs artificial intelligence or big data analytics techniques.		Establishing a facility equipment data-driven operational model for backend analysis of operational data and predictive estimation.	

Item	Innovative Techniques	Design Award	Performance and Design Award	Renovation Award
4	Energy-saving and carbon reduction	Propose new technologies, new construction methods, new materials, or innovative management measures for energy conservation and carbon reduction in engineering, aiming to achieve carbon reduction goals.	Propose specific energy-saving and carbon reduction practices and benefits in the mechanism for maintenance and operational management.	Propose specific energy-saving and carbon reduction practices and benefits in the mechanism for maintenance and operational management.

#6 Operational Data Sheet

Operation Performances are not limited on following sheet. Designer award with designed value, Performance & Renovation awards with existing operational data

1. EUI(Energy Utility Intensity) per unit construction floor area (CFA) per year	kWh/m^2/year
2. CO2 emission per KWh per year = A (kWh) x B (CO_2e per kWh) A: KWh per year、B: CO2 emission factor for power consumption Other energy consumption for CO2 emission = CO_2e (gas) + CO_2e (oil) + …	kgCO_2e/year kgCO_2e/year
3. Annual water consumption per person	m^3/person/year
4. Water recycling rate A: Rainwater storage annual utilization rate = Rainwater annual utilization/ Total annual water consumption of buildings B: Annual utilization rate of reclaimed water = Reclaimed annual utilization/ Total annual miscellaneous water consumption of buildings	 % %
5. Indoor Air quality (IAQ) CO2 concentration CO concentration TVOC HCHO	 ppm ppm ppb ppm
6. Annual labor costs per square meter	man-hour/m^2/year
7. Rental income performance index **R = P/Q** P: Rental income per unit area (CFA) Q: Average rent value in same district	
8. Insurance fee reduced (Optional)	NT$
9. User satisfaction survey result	
Others:	

#6-1 Operational Data Sheet Explanation

1. EUI (Energy Utility Intensity) per unit construction floor area (CFA) per year

Formula :

EUI = Annual power consumption / Indoor floor area (unit：kWh/ m^2 /year)

Indoor floor area = Total building floor area – Indoor parking lot floor area

2. CO2 emission per KWh per year = KWh x CO_{2e} per KWh

Formula :

CO2 emission factor for power consumption in 2022 is 0.495 kg / KWh (Energy Bureau of MoEA, Taiwan)

CO2 emission per KWh per year = annual power consumption x CO2 emission Factor

3. Annual water consumption per person

Formula :

Annual water consumption per person = annual water consumption (m3) / annual average person in building

4. Water recycling rate

Formula :

a: Rainwater storage annual utilization rate = Rainwater annual utilization/ Total annual water consumption of buildings

b: Annual utilization rate of reclaimed water = Reclaimed annual utilization/ Total annual miscellaneous water consumption of buildings

Reclaimed annual utilization : Miscellaneous living drainage in building (such as bath water, hand washing water, dishwashing water or lightly used sewage drainage) which can reach a certain water quality standard after aggregated processed and non-drinking yearly

5. Indoor Air quality (IAQ)

Formula :

CO2 concentration : Average value for 8 consecutive hours

CO concentration : Average value for 8 consecutive hours

TVOC : Average value for one hour

HCHO : Average value for one hour

6. Annual labor costs per square meter

Formula :

Annual labor costs per square meter = Annual manpower hours related to building facilities / total building floor area

7. Rental income performance index R = P / Q (no need for self-own building)

Formula :

P : Rental income per unit area (CFA)

Q : Average rent value in same district

R = P / Q

8. Insurance fee reduced (Optional)

insurance companies are willing to lower their premiums because of smart application planning

#7 Sharing of Best Practice

1. IGB Planning and Design/Construction Process/Execution Effectiveness/User Experience Sharing:
2. Experience Sharing on Intelligent Green Technology System Products/Application Cases/Execution Effectiveness, etc.:

#8 Public Engagement and Education

Public engagement and educational explanation generated by intelligent green buildings: (ex, post-construction visitation numbers, visitor demographics, interactive engagement, product adoption, and user reviews, etc.)