2025 APIGBA奖优秀智能绿色建筑项目和系统奖提交和评估指南

APIGBA(亚太地区智能绿色建筑联盟)成立于2014年4月，旨在为亚太地区的人们提供智能绿色建筑技术的学术和技术交流平台，以促进安全、健康、便利、舒适、节能和可持续发展的环境。

“APIGBA优秀智能绿色建筑项目奖”和“APIGBA优秀智能绿色建筑系统奖”每两年颁发一次，旨在随着信息和通信技术的进步，激发建筑项目和系统的创新发展。通过这些手段，该地区的建筑及其相关行业将向前发展，与全球同行保持同步。

1. 参赛者资格

奖项参赛者须符合下列其中一项资格:

1. 基于智能绿色建筑理念设计的建筑。
2. 现有建筑采用智能绿色建筑技术改造。
3. 在(1)或(2)的建筑物上实施的智能绿色建筑系统。
4. 建筑物总建筑面积必须超过2000米^2。
5. 申请“优秀智能绿色建筑表现奖”的参赛单位，必须提供建筑物的营运资料，而该建筑物必须已营运超过一年。

2. 奖项类型

根据参赛者的特点，奖项分为四个类别:

1. **优秀智能绿色建筑设计奖**
2. **优秀智能绿色建筑运行使用奖**
3. **优秀智能绿色建筑改造奖**
4. **优秀智能绿色建筑系统奖**

3. 评估

1. 评估将分三个阶段进行(表1):
   1st阶段:每个APIGBA国家/地区成员接受参赛者的提交，并向主办APIGBA成员推荐每个优秀智能绿色建筑奖(即设计、性能和装修类型)不超过8名候选人和优秀智能绿色建筑系统奖不超过5名候选人的候选名单。

   2nd阶段:评审委员会从入围名单中选出各优秀智能绿色建筑奖的5名半决赛选手和优秀智能绿色建筑系统奖的5名半决赛选手参加APIGBA大会的决赛。

   决赛阶段:所有半决赛选手将在APIGBA大会上进行口头陈述。评审委员会将在提交后作出最终评判。
2. 申请“优秀智能绿色建筑系统奖”的参赛单位，必须已在其中一间“优秀智能绿色建筑奖”的参赛单位内实施。
3. 每名APIGBA会员应提名2名具有智能绿色建筑专业背景的合格评委组成评审委员会。评审委员会的任务是从推荐作品中选出优秀的建筑项目和系统。

表1 APIGBA奖项不同评审阶段的推荐作品数量

	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. 投稿材料内容

1. 所有提交材料必须是英文的，并在截止日期前提交给当地的APIGBA成员。参赛者应提交申请材料的硬拷贝15份和电子副本一份(PDF格式)。提交的内容不超过60页(A4尺寸)，包括附录。

2. 提交材料应包括但不限于表2中列出的以下内容。

表2建议提交的内容

	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:强制性△:可选性

5. 注册费

1. 在一个类别中提交的每个项目的**注册费**为**USD1000**美元**或MOP8000**澳门币。
2. 报名费必须不迟于**2025年6月30日**收到，申请才会被考虑。
3. 付款方法**:**

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

*在2025年10月16th和2025年10月17th，将为每个项目团队提供3个免费的欢迎晚宴和仪式午餐席位。

6. 时间框架

2025 APIGBA奖项评选将由APIGBA-澳门主办，时间安排如下:

表3 2025年APIGBA奖项的时间框架

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. 联系信息

主办单位:APIGBA会员:中国澳门绿色建筑与节能协会地址:澳门B-C街7号澳门世界贸易中心918号联系人:菲奥娜女士/秘书

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U: https://www.chinagbc-macau.org/

优秀智能绿色建筑项目及系统奖项表

#1申请表格
#2建筑信息表

#3智能绿色建筑概况

#4系统/设备信息

#5自我评估列表

#6运营数据表

#7最佳实践分享

#8公众参与和教育

#1申请表格

☒设计奖☒表现奖☒革新奖☒系统奖

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建筑信息表

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系统/设备信息

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自我评价清单

		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				

(创新技术是加分选项)

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运营数据表

操作性能不限于以下表格。具有设计价值的设计师奖，具有现有运营数据的性能和翻新奖

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操作数据表说明

1. 每年单位建筑面积能源效用强度EUI (CFA)

EUI =年用电量/室内建筑面积(单位:千瓦时/米^2/年)室内建筑面积=建筑总面积-室内停车场建筑面积

2. 每千瓦时年CO2排放量=千瓦时x每千瓦时二氧化碳当量

公式:

2022年电力消费CO2排放系数0.495 kg /千瓦时(台湾能源部能源局)

每千瓦时年CO2排放量=年耗电量×CO2排放系数

3. 年人均用水量

公式:

人均年用水量=建筑年用水量(m3) /人均年用水量

4. 水的循环利用率

公式:

a:雨水储存年利用率=雨水年利用率/建筑年总用水量

b:再生水年利用率=再生水年用量/建筑年杂项用水总量

再生水年度利用:建筑物内的杂项生活污水(如洗澡水、洗手水、洗碗水或少量使用的污水排放)，经汇总处理后达到一定的水质标准，每年不供饮用

5. 室内空气质素(IAQ)

公式:CO2浓度：连续 8 小时平均值 CO 浓度：连续 8 小时平均值 TVOC 一小时平均值 HCHO 一小时平均值

6. 每平方米年人工成本

公式:

每平方米年度人工成本=年度与建筑设施相关的人力工时/建筑总建筑面积

7. 租金收入绩效指标R = P / Q(无需自建)公式:

P:单位面积租金收入(CFA)

Q:同一地区的平均租金值

R = P / Q

8. 保险费减免(可选)

保险公司愿意因为智能申请规划而降低保费

#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.)