



粤港澳大湾区绿色金融联盟
Guangdong-Hong Kong-Macao Greater Bay Area Green Finance Alliance



HKGFA
香港綠色金融協會
Hong Kong Green Finance Association

HONG
KONG
2050
IS NOW



2022 GBA-GFA | HKGFA Annual Forum
Decarbonising Buildings
in the Greater Bay Area: Policy and
role of Sustainable Finance

粤港澳大湾区建筑脱碳研究

22 September 2022

Overview 项目概要

Collaborations 合作机构:

GBA Green Finance Alliance (GBA-GFA) – led by HKGFA
 粤港澳大湾区绿色金融联盟 - 香港绿色金融协会牵头

And 与

Hong Kong 2050 Is Now, World Resources Institute (China),
 Tsinghua University Building Energy Research Centre (THUBERC)
 HK2050IN, 世界资源研究所, 清华大学建筑节能研究中心

Goals 目标:

Decarbonize building sector and to maximize green financing opportunities
 将建筑业脱碳及增大绿色融资机遇

Completed 已完成

Phase 1 第一阶段

“Green Building Rating Systems
 Energy Benchmarking Study”
 《绿色建筑评级体系能源范畴
 对标研究》

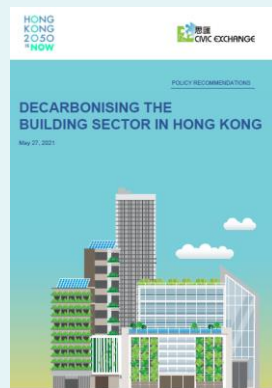


“Decarbonising Hong Kong
 Buildings: Policy Recommendations
 and Next Steps”
 《建筑去碳化政策报告》



Phase 2 第二阶段

Decarbonising Hong Kong Buildings:
 Policy Whitepaper
 《香港建筑脱碳政策白皮书》



Phase 3 第三阶段 – GBA Focus 聚焦大湾区

Project objectives 项目目标:

1) Investigate state of play of Policy and Sustainable Finance through 4 case cities in the GBA: Guangzhou, Shenzhen, Zhuhai and Foshan

通过大湾区四个案例城市分析政策和绿色金融现况: 深圳、广州、珠海、佛山

2) Identify challenges and opportunities in promoting green/low-carbon buildings

识别推动绿色低碳建筑的挑战和机遇

3) Provide recommendations to accelerate building sector decarbonisation

提出建议, 加速提升建筑能效和绿色低碳转型

Executive Summary
 行政摘要



Policy and market developments raise opportunities for green and sustainable finance (GSF) in the real estate sector

政策和市场的发展为房地产行业的绿色和可持续融资(GSF)带来机遇

Policy driver: 政策驱动:

Strong top-down policies will stimulate growth in green building and financing demand
自上而下的有力政策将刺激绿色建筑和融资需求的增长

14th FYP target requires all new urban buildings to be green buildings by 2025
十四五年目标要求到2025年，所有新建城镇建筑为绿色建筑

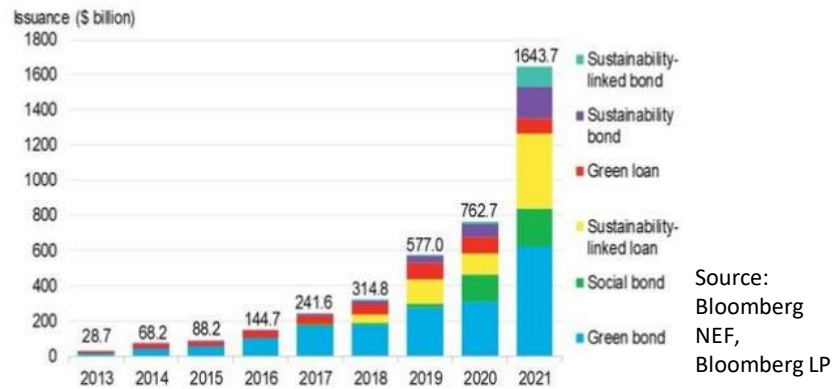
Proportion of **star-level green buildings** required in new urban green building:
星级绿色建筑占城镇新增绿色建筑比例:

Key Indicator 关键目标	14 th FYP target 十四五目标
Guangdong Province 广东省	30%
Nine GBA cities 大湾区珠三角九市	45%

Current market: 市场现况:

Escalating investment appetite in GSF and real estate segment
绿色及可持续金融和房地产领域的投资欲望攀升

Sustainable debt annual issuance: 可持续债务年度发行量:



2021 Green and Sustainable Debt Market 市场	Share 占比
Global 全球	10%
GBA 粤港澳大湾区 (CBI UoP only 2020 绿色债券)	44%
HK 香港	39%

Opportunities: 机遇:

USD 27 trillion additional investment opportunities China 30/60 goal
今后30年，“碳中和”将为中国带来27万亿美元的投资机遇。

Investment opportunity in **construction and real estate industry** from 2020 to 2060:
从2020年到2060年建筑和房地产行业的投资机遇:

Level 层面	USD billion 十亿美元
National 国家	6000
Guangdong 广东省	700
Nine GBA cities 大湾区九市	530

Green buildings incentives 绿色建筑的激励措施

Measure 种类	Policy政策 (Year 年份)	Details 详细资料
Subsidies 补贴	National and provincial-level policies 国家及省级政策 (2012-2013)	Financial reward for each m ² of certified green building constructed 每平方米绿色建筑给予财政激励
Provident fund loan rewards 公积金额度奖励	"Guangdong Province Green Building Regulations" 《广东省绿色建筑条例》 (2020)	10% increase in the amount of housing provident fund loan for purchasing 2-star-above GB 购买2星级以上绿建，住房公积金贷款金额可增加10%。
Tax concession 税费优惠		For CAPEX on R&D of new green building technologies, techniques and products 绿色建筑新技术、新工艺、新产品的研发费用可享税收优惠
Plot ratio calculation rewards 容积率奖励		<ul style="list-style-type: none"> Increased floor area from adoption of green building technologies Portion of floor area built using MiC (modular integrated construction) technology → Can be exempted from plot ratio calculation 采用绿色建筑技术而增加的建筑面积采用MiC（模块化集成建筑）技术建造的部分楼层面积 → 可不计入容积率核算

INDIRECT incentives 间接激励

Subsidies补贴 (RMB/m ²)	China Green Building Label Certification Level; Subsidy 国家绿色建筑评价标示的等级; 补贴		
	One star 一星	Two star 二星	Three star 三星
	RMB/m ²	RMB/m ²	RMB/m ²
Shanxi 山西	/	100	150
Beijing 北京	/	50	80
Shanghai 上海	/	50	100
National 国家	/	45	80
Shandong 山东	15	30	50
Ningxia 宁夏	15	30	50
Guangdong 广东	/	25	45
Shenzhen 深圳	10	20	50
Xinjiang 新疆	/	20	40
Yunnan 云南	/	/	/
Shaanxi 陕西	10	15	20
Hebei 河北	/	15	25
Jilin 吉林	/	15	25

However, the **subsidies were not effective** due to...
可是是补贴效用不大，因为.....

Difficulty in verification 认证困难	Difficulty in verifying whether green buildings achieving design ratings still meet the requirements during actual operation. 难以验证达到绿色设计标识的建筑在实际运行过程中是否仍然符合要求
Narrow scope 范围狭窄	Limited to projects that have "significant demonstration value" 补贴只限给予有「重大示范意义」的项目
Weak governance and exploitation of subsidies 治理不力，导致补贴被利用	Consultancies and developers build low-cost and low-quality green buildings to profit on the difference in cost and subsidy. 咨询机构和开发商建造低成本、低质量的绿色建筑，以赚取成本和补贴的差额

Recommendations for GBA cities 对大湾区城市的政策的建议

Example of international green building certification:

EDGE (“Excellence in Design for Greater Efficiencies”) is a green building certification developed by IFC and recognised by the World Green Building Council

To obtain the EDGE certification, a project must achieve >20% savings in energy, water and embodied energy in materials

国际绿色建筑认证示例:

EDGE绿色建筑认证是由国际金融公司开发并接受世界绿色建筑委员会认可。

获得EDGE认证的项目必须在能源、水和材料蕴含能源分别减少 >20%

Utilize international green building certifications

绿色建筑认证

Apply dual certification of local and global green building certification (i.e. CGBL and EDGE)

争取获得本地和国际绿色建筑标准的双重认证（如：中国绿色建筑评价标识和EDGE）

Recognise international certifications in local policy
在当地政策中认可国际认证

Improve subsidy policies

补贴

Subsidise developers the certification costs of green building certifications

资助开发商绿色建筑认证的费用

Make subsidies inclusive to all projects, not just selected “demonstration projects”

让补贴涵盖所有项目，而不仅限于“示范项目”

Expand variety of financing tools

融资工具

Expand the variety of green and sustainable financing products used – particularly the use of sustainability-linked structures

增加绿色和可持续融资产品的种类，特别更多使用可持续性挂钩产品

Sustainability – Linked Loans (SLL):

Offers tiered discount rate based on achievement on pre-agreed ESG targets

KPIs could include:

- Green building certifications
- GHG emissions
- Energy consumption
- Water consumption
- Waste
- And more...

可持续挂钩贷款 (SLL):

公司达成若干预定的环境、社会和管治目标，可享受不同程度的利率优惠

关键绩效指标可能包括:

- 绿色建筑认证
- 温室气体排放
- 能耗
- 水耗
- 废物
- 以及更多...