



Local Governments
for Sustainability

EAST ASIA

Empowering Local Climate Actions: ICLEI's Efforts

An Introduction to Regional Roadmap for Building and Construction in the Greater Bay Area of China

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ICLEI's Mission

ICLEI – Local Governments for Sustainability (known as “ICLEI”) is a global network working with more than 2,500 local and regional governments committed to **sustainable urban development**.

Active in 125+ countries, we influence sustainability policy and drive local action for low emission, nature-based, equitable, resilient and circular development.

**2,500+ LOCAL
AND REGIONAL
GOVERNMENTS**

**ACTIVE IN
125+
COUNTRIES**

**400+
EXPERTS IN
24 OFFICES
WORLDWIDE**

Introduction

The **Global Alliance for Buildings and Construction** (GlobalABC) has launched a Roadmap process to facilitate a shared language and vision for achieving the complete decarbonization of the sector.

The project team applied this approach to the GBA region, starting in 2022, with the aim of **engaging multiple stakeholders**.

This highly dynamic megalopolis has the potential to play a **pioneering role** in supporting China's carbon neutrality journey.



Global Alliance
for Buildings and
Construction

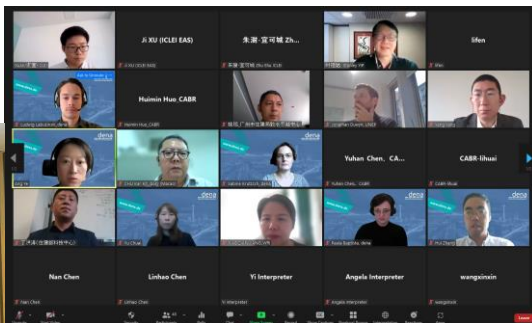


中国建筑科学研究院有限公司
China Academy of Building Research



ICLEI's Role in the Project

Stakeholder engagement



Knowledge generation

Regional Roadmap for Buildings and Construction in China's Greater Bay Area

Towards a zero-emission, efficient, and resilient
buildings and construction sector



Existing Buildings

Create awareness for the decarbonisation of the building stock. Prioritize public buildings to lead by example. Accelerate scalable modularized retrofit measures.

Appliances & Systems

Increase supply and demand for high energetic performance in appliances.

Building Operations

Implement energy management obligations and processes to drive an energy efficient building operation through information and behaviour change.

Resilience

Implement forward-looking planning approaches and accelerate dynamic response speed and flexibility to climate emergencies.

New Buildings

Scalability: significantly increase ambition target and building codes in all project phases. Mitigate the risk of stranded long-term investments.

Materials

Integrate life cycle perspectives through low carbon materials and recycling programmes.

Urban Planning

Promote integrated sustainable urban planning between core GBA zones, including smart city solutions.

Enablers

Key to achieve the complex transition is establishing an effective stakeholder engagement network, including public, private, academic and financial sectors, and fostering of system innovation.



新建建筑

规模化: 大幅提高所有项目阶段的减排目标和建筑规范, 降低长期投资搁浅的风险

既有建筑

培养对建筑产业脱碳的意识。优先选择公共建筑项目展示示范效果。加快落实规模化的模块化改造措施。

设备系统

增加高效设备的供应并扩大需求。

建筑运营

落实能源管理义务和程序, 通过信息采集和行为改变来推动节能建筑的运行。



建筑材料

通过低碳材料使用和回收处理推动整合生命周期的全方位减碳。

城市规划

推动粤港澳大湾区各核心区域之间的综合性可持续城市规划, 以及智慧城市解决方案。

城市韧性

实施前瞻性的规划方法, 提高对气候紧急情况的动态响应速度和灵活性。

清洁能源

扩大当地可再生能源利用和区域电网供应的规模, 实施智慧城市解决方案。

促进因素

实现复杂转型的关键是建立一个有多方利益相关者参与的高效网络, 包括公共、私营、学术和金融部门, 并促进系统创新。

Clean Energy: Background and Challenges



- Significant use of fossil fuel, but rich in renewable energy resources
- Insufficient connection to energy supply infrastructure
- Missing opportunities to trade or offset local emissions
- Missing green financing arrangements

Clean Energy: Recommendations



Policy

- Increase of renewable energy share
- Eliminate on-site fossil fuel burning equipment
- Development of electricity market and access to national ETS
- Establishment of a solid policy framework and zero-carbon strategies
- Development of innovative green financing arrangements



Technology

- Solar PV
- Solar thermal
- Offshore wind
- Energy storage
- Waste to energy
- Grid
- District energy systems



Finance

- Public funds
- Energy Service Companies (ESCOs)
- Green power procurement
- Energy prices
- Levelized Cost of Energy (LCOE) approach
- Others

Enablers



Capacity Building



Green Financing



Multi-stakeholder Engagement

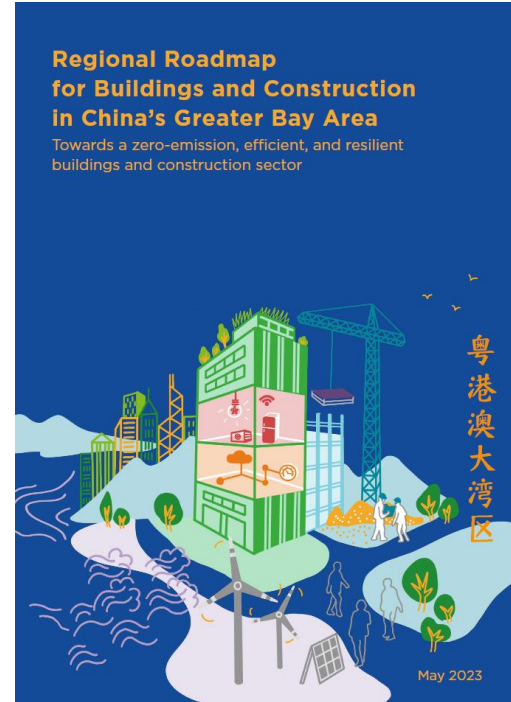
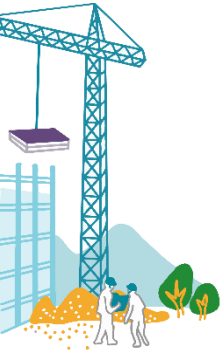


Interested in learning more?

Study



Executive Summary



Summary

ICLEI as a city network

- Global network with local impact
 - Serve a bridge between international processes and cities
 - Combine global reach with on-the-ground implementation
- Knowledge production and facilitation
 - Produce and share knowledge based on local contexts
 - Facilitate the transfer of international best practices into local actions

Local climate action

- Stakeholder engagement for climate action planning
 - ◆ Ensure relevance and applicability
 - ◆ Develop impactful actions
- Cross-sectoral collaboration (e.g., building and energy)
 - ◆ Leverage synergies
 - ◆ Achieve holistic solutions



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Thank you!

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Study



Executive Summary



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