

# City Academy Green and Thriving Neighbourhoods 绿色繁荣社区中国城市学院

## Where to start?

Understanding the framework for  
action in both old and new  
development

从哪里开始？了解新旧社区的行动框架

1st – 3rd July 2025

2025年7月1日-3日

[www.shiftcities.org](http://www.shiftcities.org)



# C40 Green and Thriving Neighbourhoods Framework

## C40 绿色繁荣社区框架

Langue | Language: CHI / ENG  
语言: 汉/英



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城市规划与15分钟城市  
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当今的城市发展模式具有高度的排放强度



Car-oriented planning  
以汽车为导向的城市规划

Urban sprawl  
城市无序扩张

Over-specialisation of land uses  
土地用途过度专业化

# Many of the challenges cities are facing today 当今城市所面临的诸多挑战

planet  
地球

**GHG emissions** 温室气体排放

**Air pollution** 空气污染

**Consumption of natural lands** 自然土地的过度消耗

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people  
人类

**Long commute** 通勤时间过长

**Lack of amenities & poor quality of life in many  
neighbourhoods**

许多社区缺乏公共设施，生活质量较差

# Urban planning as a KEY tool to reduce emissions

城市规划是实现减排目标的关键手段

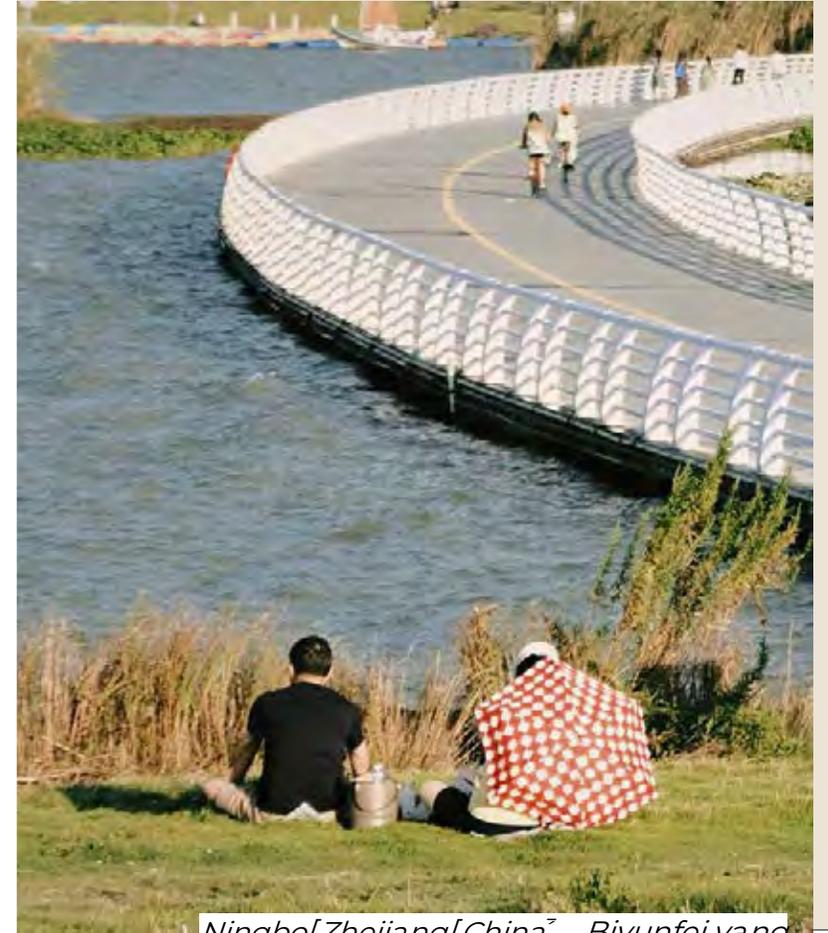


Dhaka \_ © Hasnan Monir

As urban populations continue to grow, it is critical to change the way we **plan** and **design** our cities.

By adopting a **better urban planning model - one that is compact, mixed-use and transit-oriented** - cities could cut GHG emissions by **25% by 2050.**

*IPCC report, 2022*



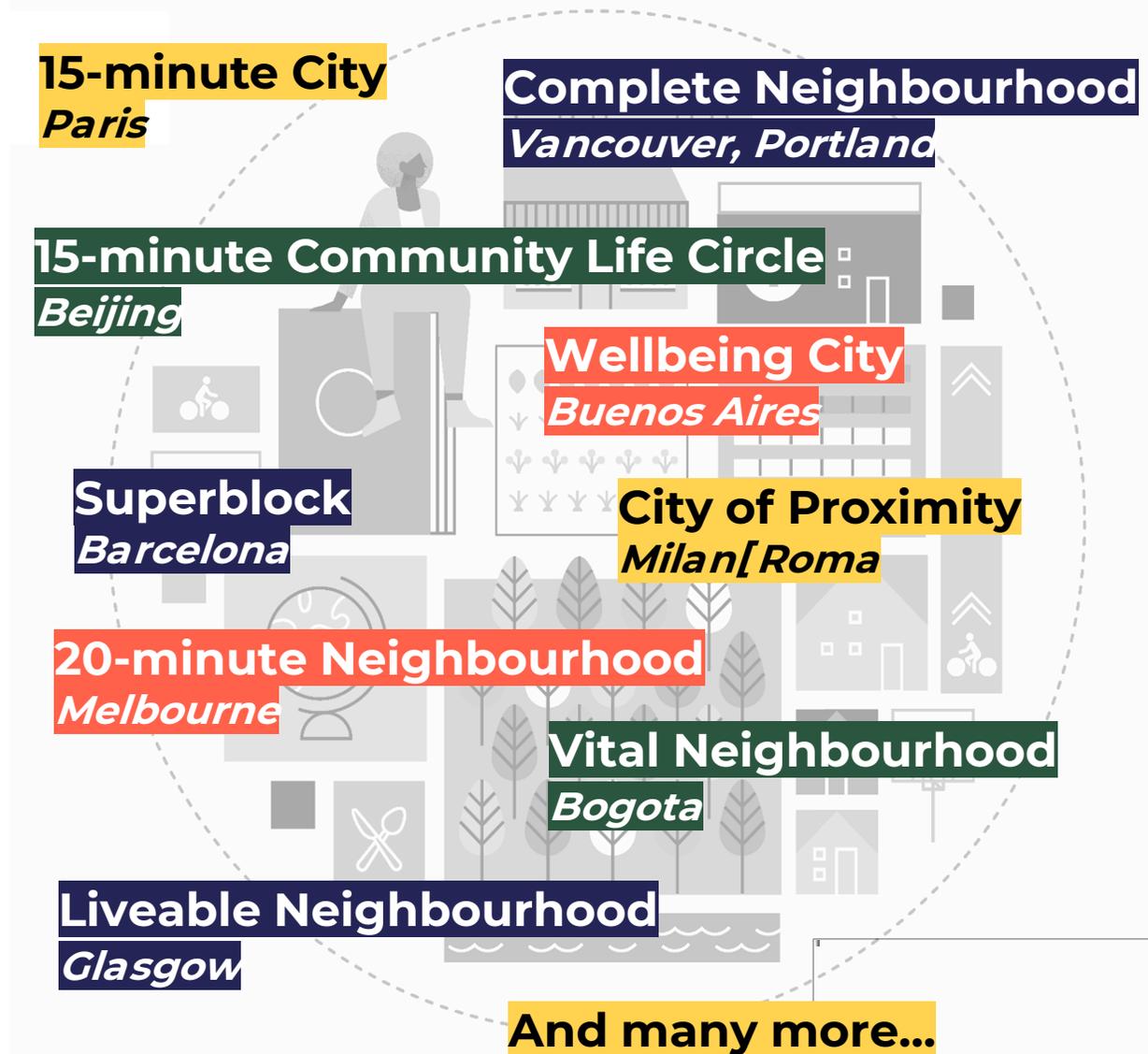
Ningbo [Zhejiang] China ~ Biyunfei yang

# A new momentum & an opportunity to shape more livable, compact cities

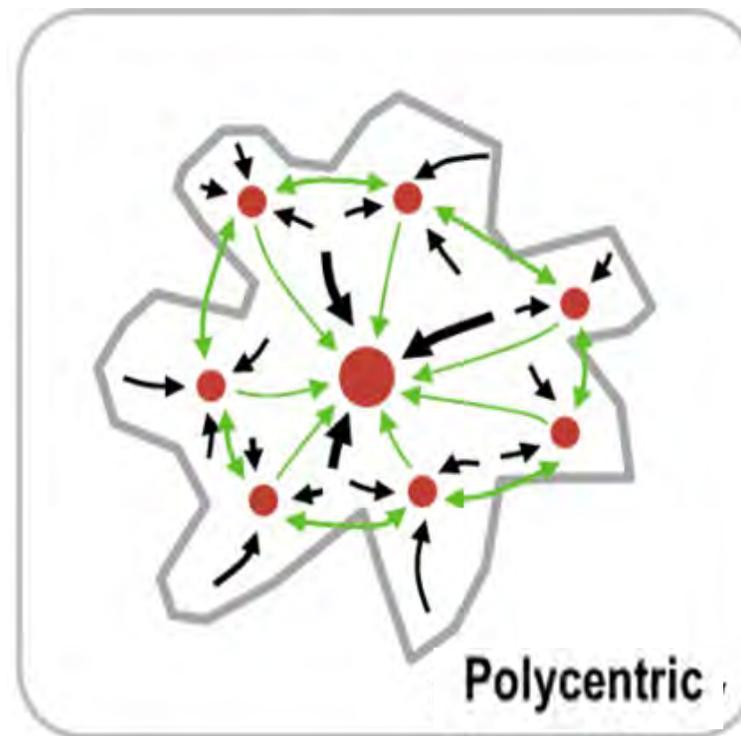
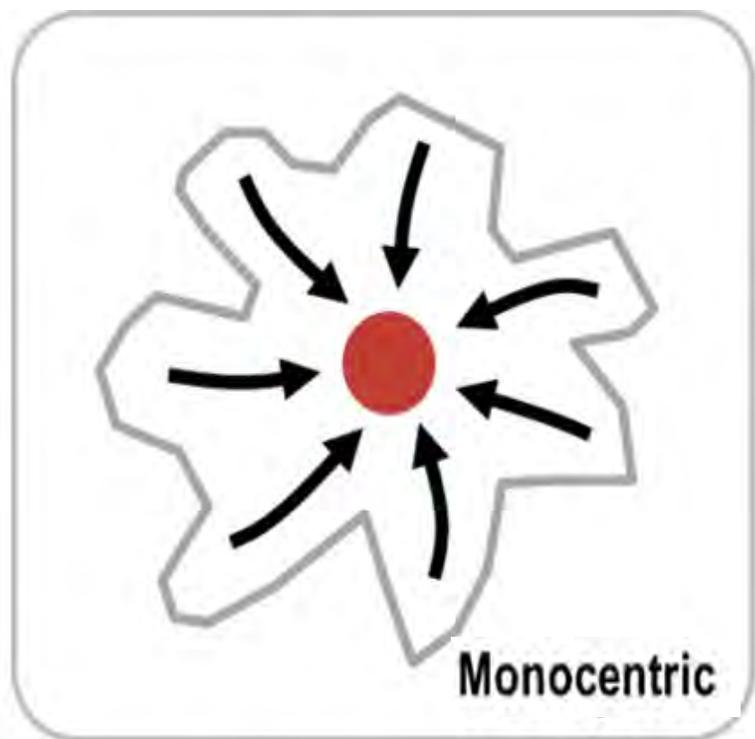
## 塑造更宜居、紧凑型城市的新动能与发展机遇

Since post-WWII, many urbanists have called for compact, mixed-use, people-centred cities — **a vision now gaining traction** to create walkable environments with better access to services for all.

- Residents of 15-minute neighbourhoods report **25% higher life satisfaction** compared to those in car-dependent areas..
- Walkable, mixed-use areas **reduce household transport costs by 20–40%**



A polycentric city made of multiple complete, walkable neighbourhoods  
多中心城市由多个完整且适宜步行的社区组成



**The neighbourhood appears as a new focus to respond to the urgency of the global climate crisis.**

社区作为应对全球气候危机紧迫性的全新关注点，日益受到重视。

# The neighbourhood opportunity 社区发展的机遇

A local and holistic approach 一种本地化且整体性的路径

Moving away from sectoral approaches, neighbourhood-scale approach offers unique opportunities to:

- **develop lighthouse projects that can inspire for wider change** and set a positive vision of cities' urban future.
- **accelerate climate actions while benefiting other critical urban agendas**, such as improving equity, health & well-being.

Neighbourhood projects can

Pioneer new policy

Trial innovative partnership arrangements

Consider creative ways to increase citizen participation

Test new technologies and solutions to reduce carbon emissions

raise ambition & drive change

# Green and Thriving Neighbourhoods

## 绿色繁荣社区

Green:  
net zero  
emissions  
绿色：净零排放

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H, η H, I l P Ф i  
H E d l  
繁荣：一个以人为  
本的有韧性的地方

**NEIGHBOURHOODS**  
Ideal scale to produce replicable solutions & inspire change

Green:  
net zero  
emissions

绿色：  
净零排放

**Minimise emissions throughout the project lifecycle and achieve net zero by counteracting any residual emissions in a robust and transparent way.**

在社区项目的全生命周期中最小化排放，并以一种稳健和透明的方式抵消任何剩余排放，从而实现净零

# Net zero hierarchy | 排放层次

避免排放  
**Avoid producing emissions**

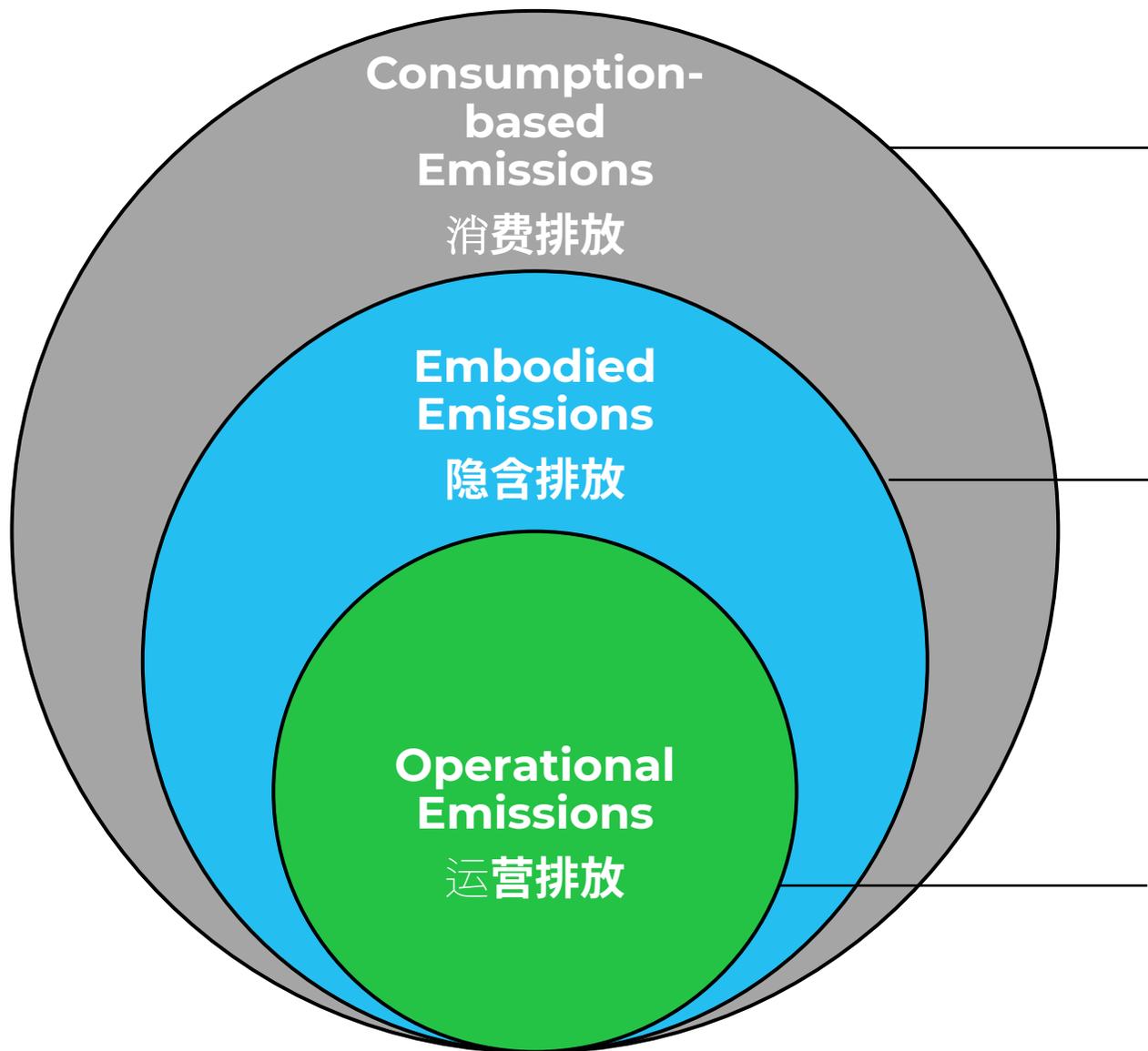
降低排放  
**Reduce emissions produced**

转向低碳技术和可再生  
**Convert to low carbon technologies and renewables**

抵消无法避免的排放  
**Compensate unavoidable emissions**



# Emissions Categories | 排放类别



Resulting from goods and services bought by the people living in the district such as food or clothes, travel and technology.

来自社区人们购买消费的商品和服务，如食物、衣服、旅行



Arise from any construction within the neighbourhood, including new construction, retrofits and maintenance, for buildings and infrastructure.

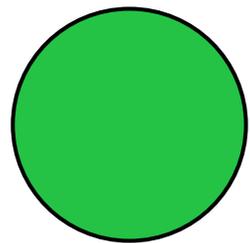
来自社区内所有建设活动，主要包括建筑和基础设施的新建、改造和维护



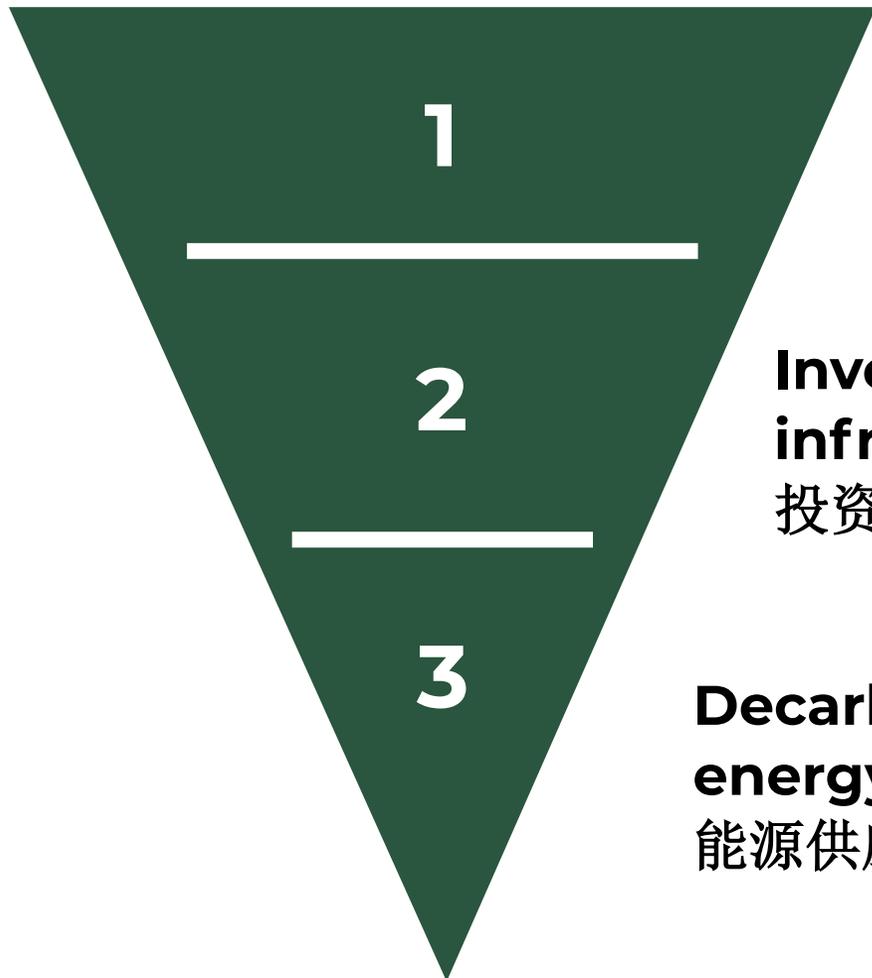
Occur continually throughout the lifetime of the neighbourhood operation, including building, energy, transport and waste management.

贯穿社区的全生命周期，主要包括建筑、能源、交通和废物管理





# Operational Emissions 运营排放



1

**Minimize energy demand**  
最小化能源需求

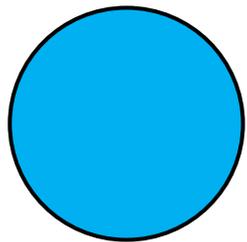
2

**Invest in energy infrastructure**  
投资能源基础设施

3

**Decarbonise energy supply**  
能源供应脱碳





# Embodied Emissions 隐含排放

1

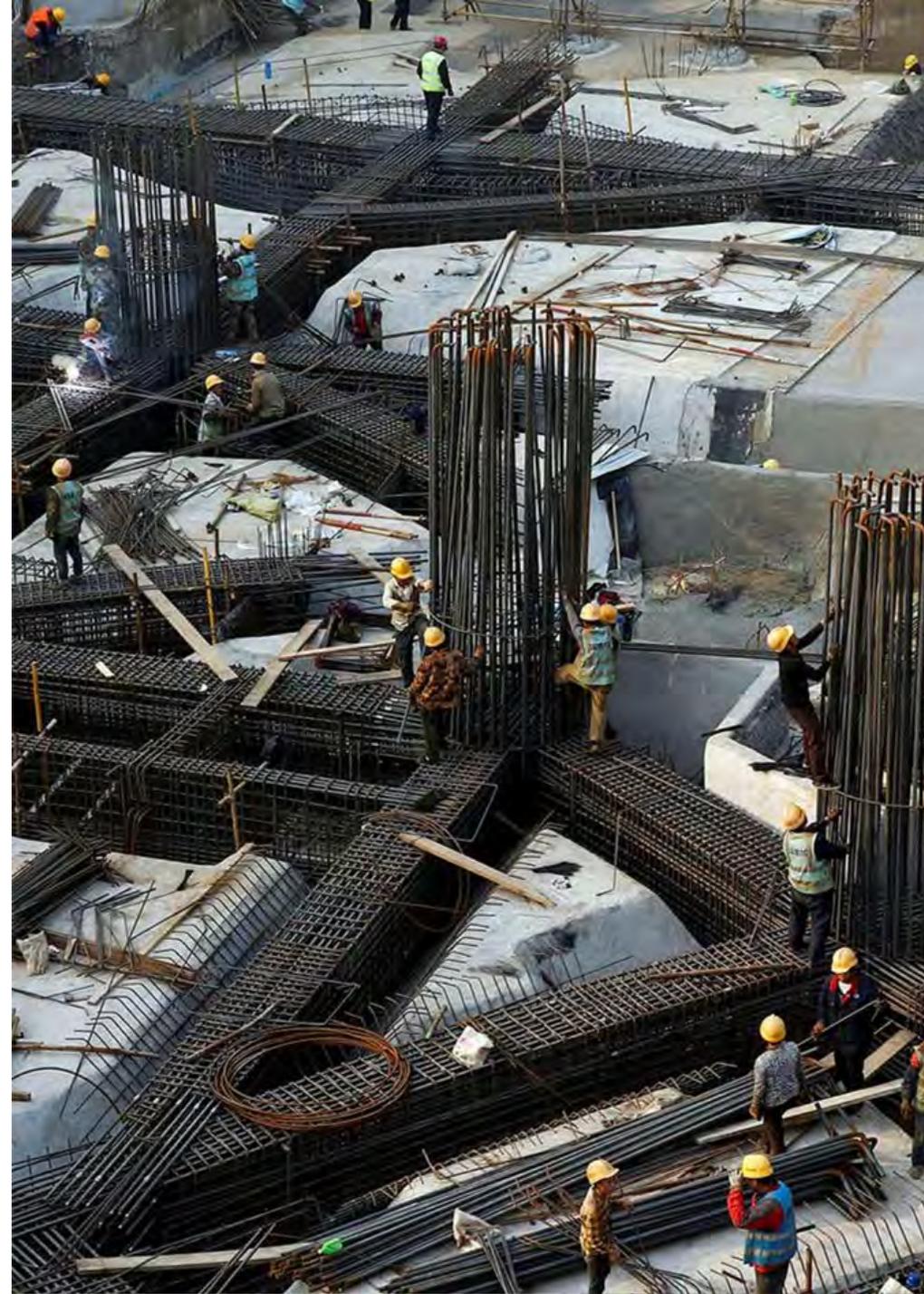
**Prioritize  
existing assets**  
优先利用现有资产

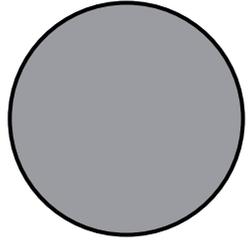
2

**Build for the future**  
面向未来进行建设

3

**Switch to low-carbon  
materials**  
转向低碳建材





# Consumption-based emissions 消费排放

1

**Foster service-based  
& sharing economy**  
推动服务型与共享型经济的  
发展

2

**Equip residents to make  
sustainable choice easy**  
为居民创造可持续选择的便捷  
条件

3

**Inform and empower the local  
community to enable  
behaviour change**  
加强社区宣传与赋能，推动行为转变



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НН/ā l

**繁荣：一个以人为本的  
有韧性的地方**







Complete neighbourhood



People-centred Streets & mobility



Green economy



Sustainable Lifestyles



Connected place

# Green & Thriving Neighbourhoods

## 绿色繁荣社区 十大行动模块



Inclusive community



Circular Resources



Clean Construction



Urban Nature & climate resilience



Green energy & buildings

# 10 principles for Green and Thriving Neighbourhoods

A neighbourhood is a system. To deliver a green and thriving neighbourhood, cities must integrate different actions in a cross-sectoral approach is key to maximize the environmental and social benefits.



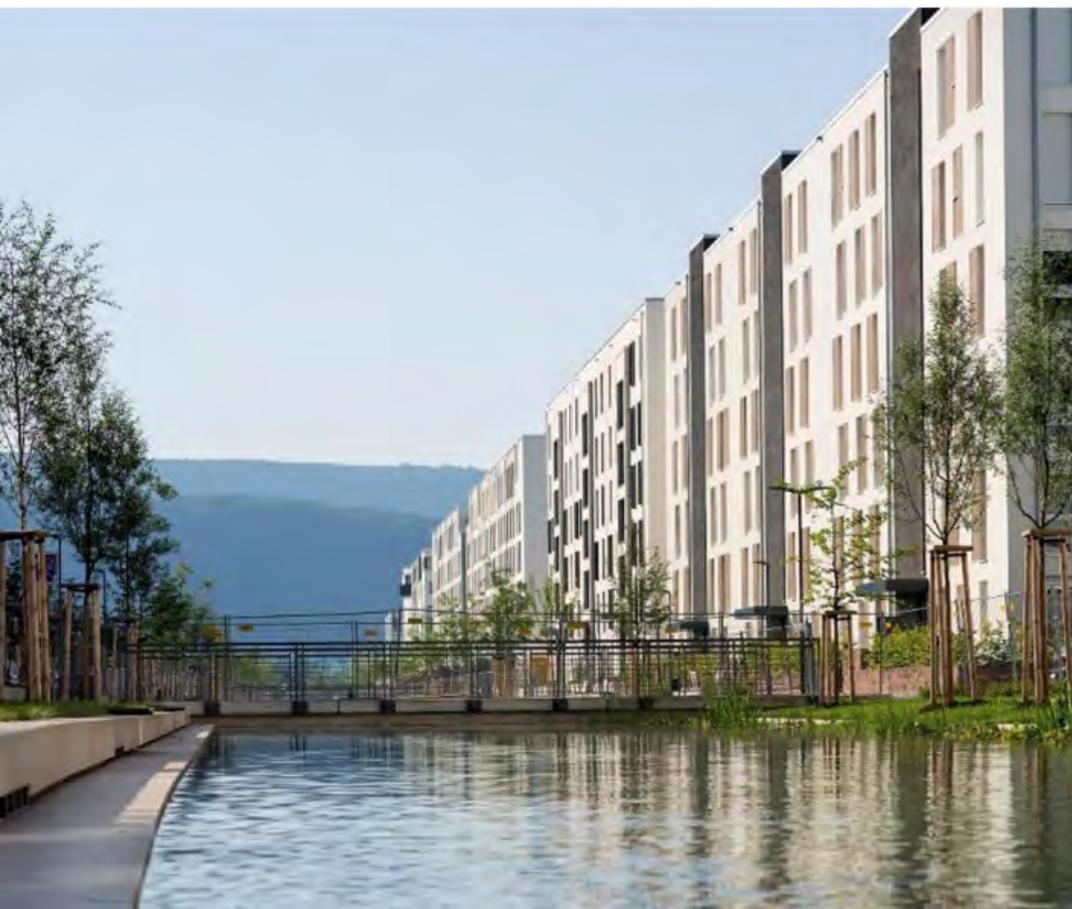
# Framework for Action 行动框架





# Green Buildings & Energy | 绿色建筑与能源

## Heidelberg, Bahnstadt District 德国海德堡，“列车新城”



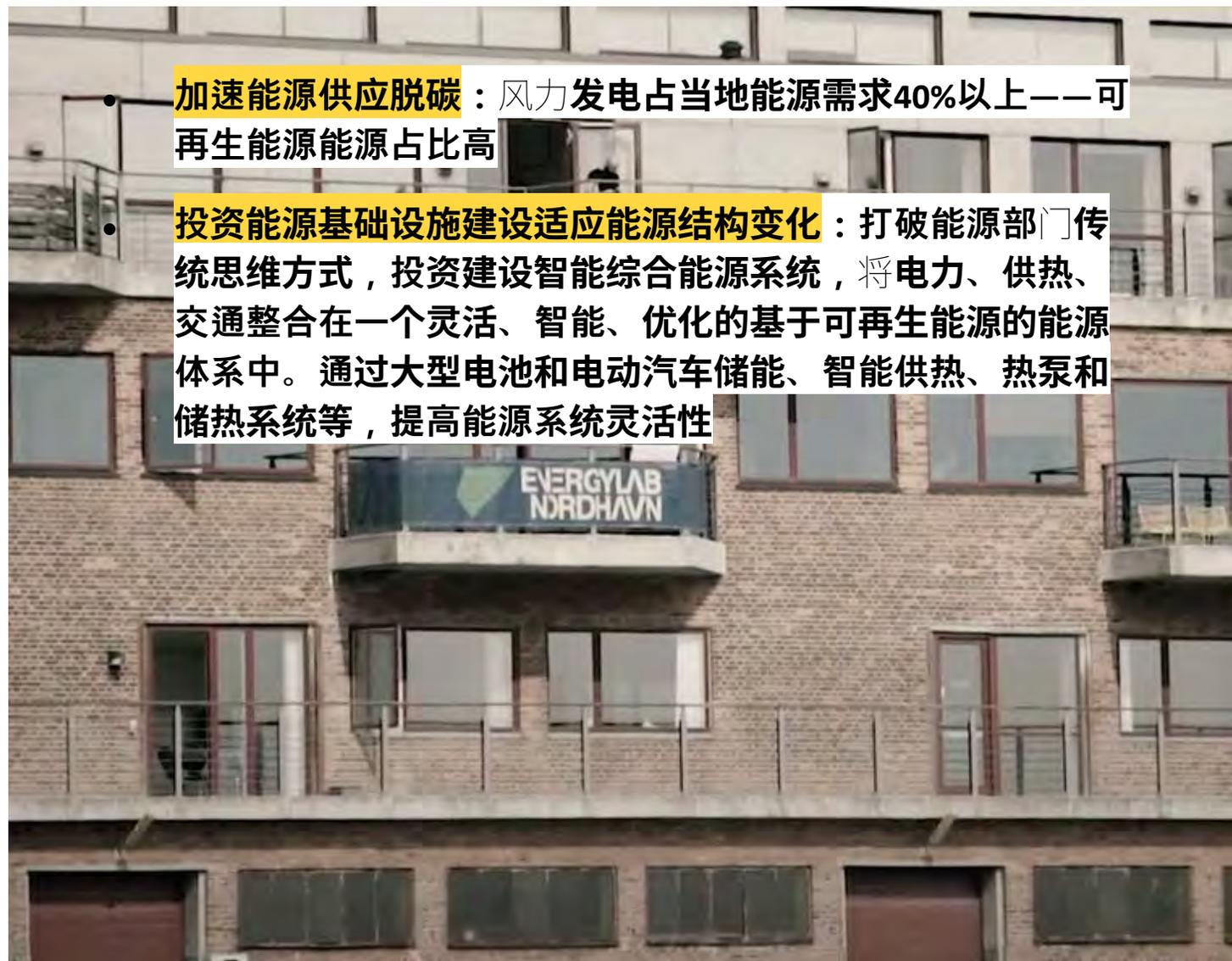
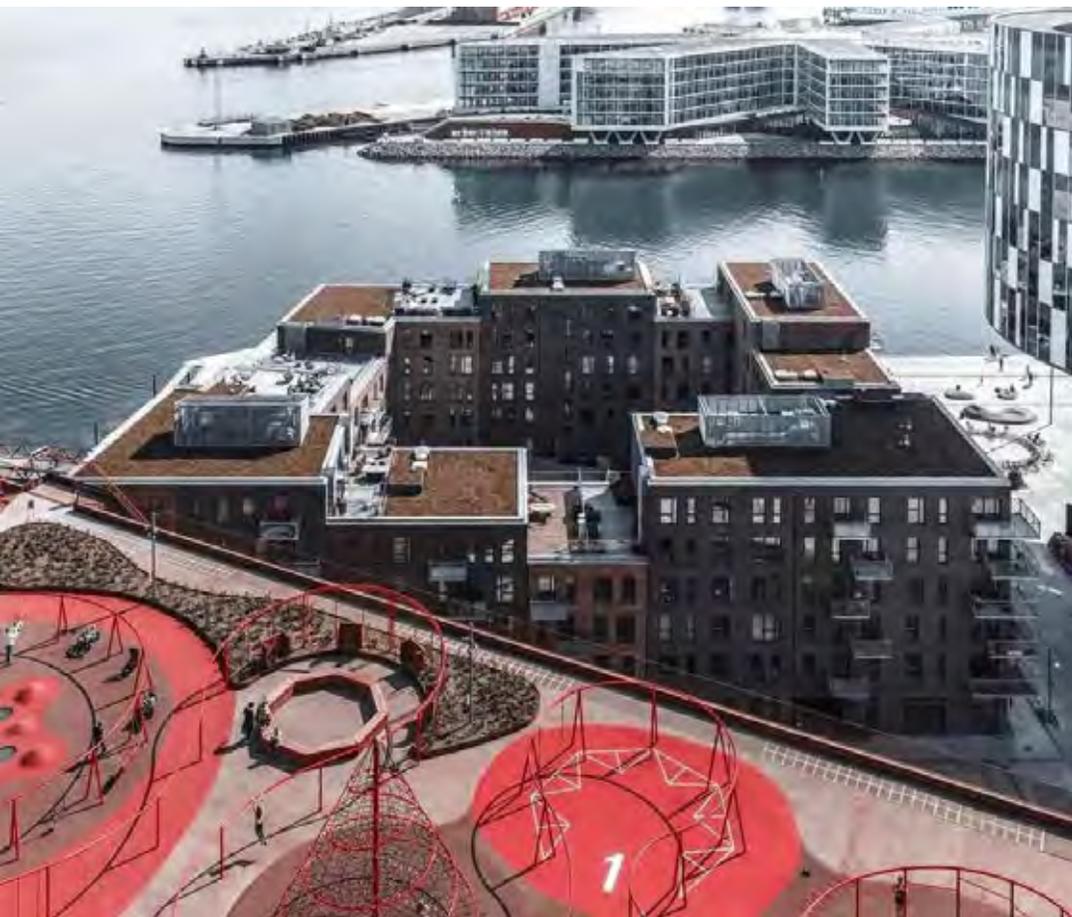
- **最大限度减少能源需求**：海德堡首个、全球最大的被动房社区之一，原址是一片铁路货场，2019年开始重建为公共和私有用地混合的社区，所有建筑按被动式房屋标准建造
- 能源需求由区域供热系统的生物质热电联产满足
- 每年因建筑能源消耗产生的人均二氧化碳排放量仅为0.13吨，远低于海德堡市平均水平2.0吨





# Green Buildings & Energy | 绿色建筑与能源

## Copenhagen, EnergyLab Nordhavn 丹麦哥本哈根，北港新区“能源实验室”



- **加速能源供应脱碳**：风力发电占当地能源需求40%以上——可再生能源占比高

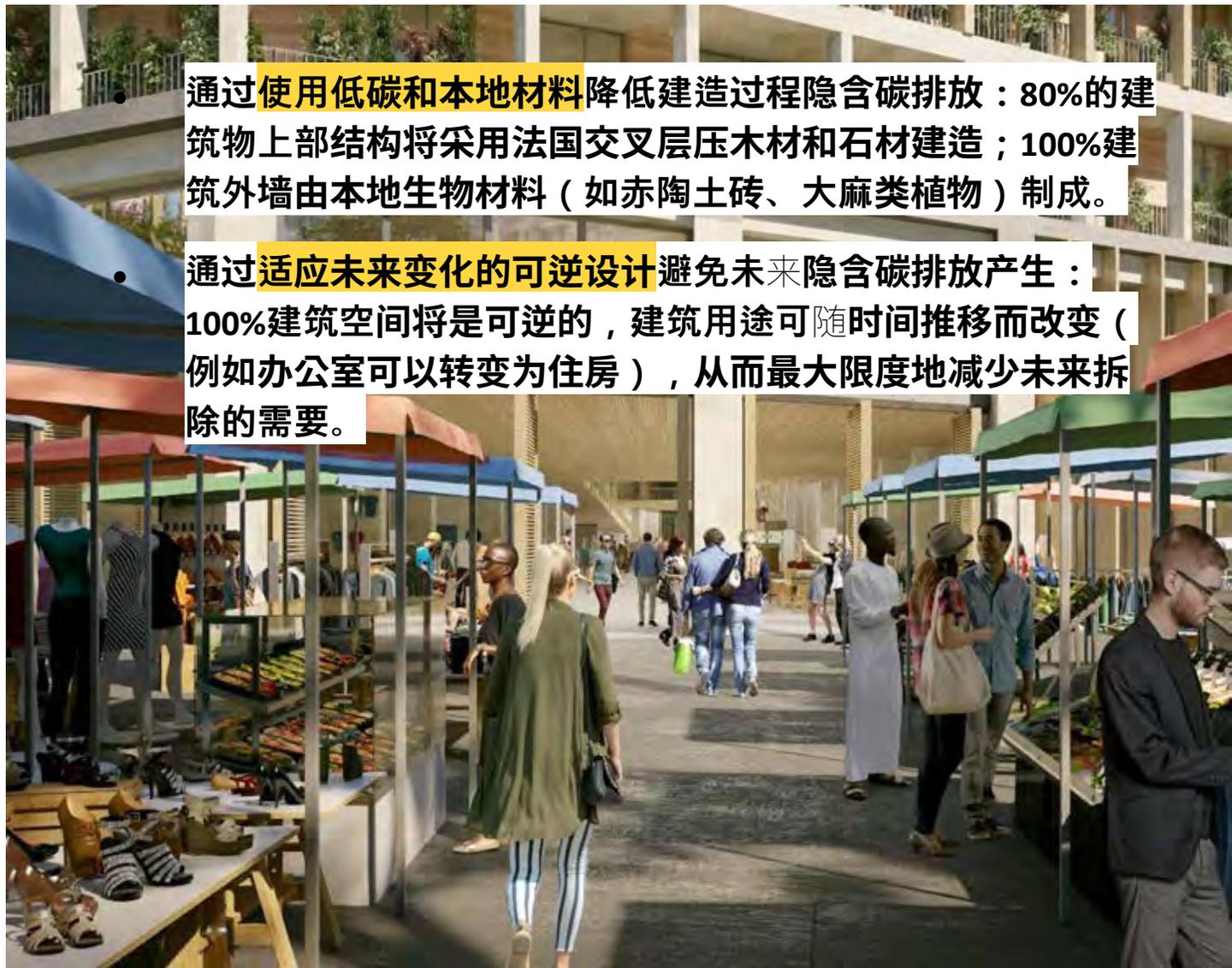
- **投资能源基础设施建设适应能源结构变化**：打破能源部门传统思维方式，投资建设智能综合能源系统，将电力、供热、交通整合在一个灵活、智能、优化的基于可再生能源的能源体系中。通过大型电池和电动汽车储能、智能供热、热泵和储热系统等，提高能源系统灵活性



# Clean Construction | 清洁建造

Paris, Collective for Climate project in  
La Porte de Montreuil

法国巴黎，蒙特勒伊门“气候集体项目”街区



- 通过使用低碳和本地材料降低建造过程隐含碳排放：80%的建筑物上部结构将采用法国交叉层压木材和石材建造；100%建筑外墙由本地生物材料（如赤陶土砖、大麻类植物）制成。

- 通过适应未来变化的可逆设计避免未来隐含碳排放产生：100%建筑空间将是可逆的，建筑用途可随时间推移而改变（例如办公室可以转变为住房），从而最大限度地减少未来拆除的需要。



# Complete Neighbourhood | 完整社区

Qingdao, Zero-carbon Area of Sino-German Ecological Park  
青岛，中德生态园零碳试验区



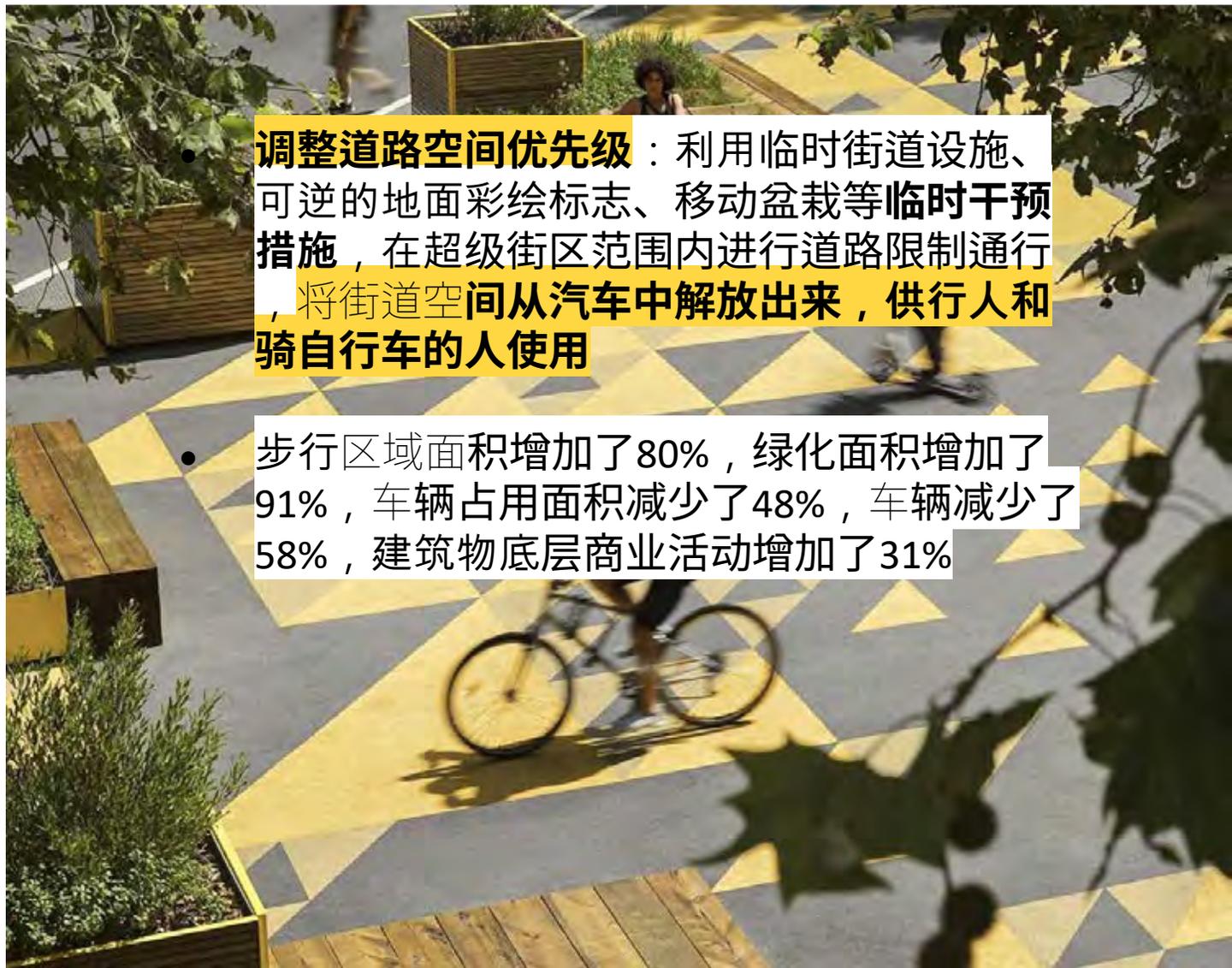
Key strategy | 关键策略：  
15 minute city | 15分钟生活圈

- **构建职、住、休、教、医五元平衡的家园系统**：每个家园面积控制在1平方公里左右，家园中心建设与公共交通站点紧密结合，形成一个包含就业、绿地、商业服务、教育和医疗等多样功能的五元平衡核心，利用沿街配套、商业、文化设施等形成居民使用的生活街。
- **建设居住、就业、绿地、商业服务、教育和医疗等多样功能的邻里社区组团**：规划一处九年一贯制学校、一处9班幼儿园和一处6班幼儿园，幼儿园所服务半径500米范围内，几乎覆盖所有居住区总用地面积。南部临山区域规划一处文化活动中心；北部规划一处社区体育中心；东南部规划一处敬老院1处；并规划多处商业金融服务设施。



# People centred Mobility | 以人为本的交通

Barcelona, Superblock Poblenou  
西班牙巴塞罗那，波布雷诺“超级街区”



- **调整道路空间优先级**：利用临时街道设施、可逆的地面彩绘标志、移动盆栽等**临时干预措施**，在超级街区范围内进行道路限制通行，将街道空间从汽车中解放出来，供行人和骑自行车的人使用
- 步行区域面积增加了80%，绿化面积增加了91%，车辆占用面积减少了48%，车辆减少了58%，建筑物底层商业活动增加了31%



# Connected place | 互联互通

## Medellin, Cable Car System

哥伦比亚麦德林，缆车系统连接社区与城市

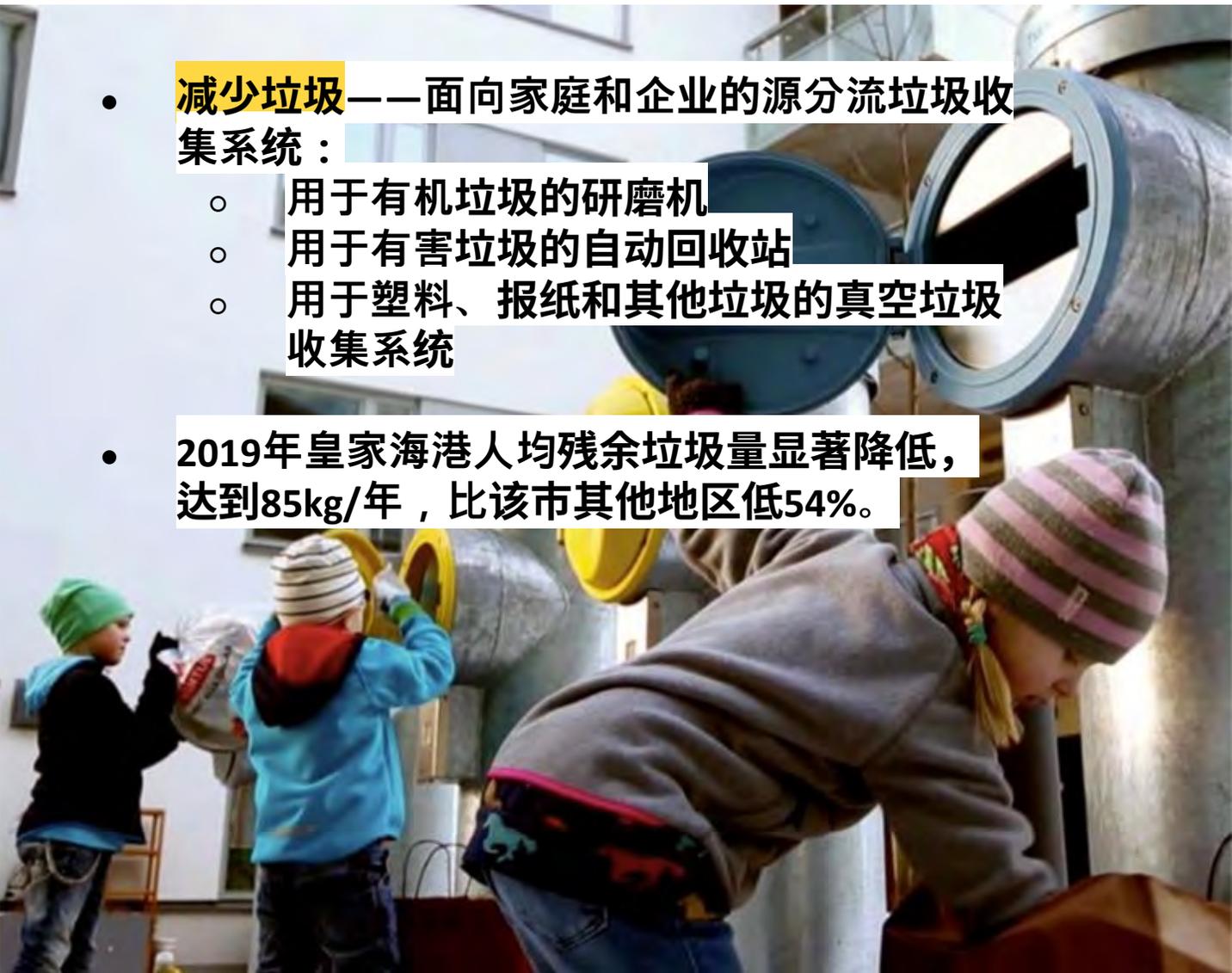


- 增加与公共交通系统的物理连接：将缆车系统整合到城市地铁系统中，改善贫困的临时住区进入市中心的通道
- 例如第一辆缆车将位于山腰的社区之一巴里奥斯社区与市中心相连接，到市中心的时间从1个多小时缩减到15分钟



# Circular Resources | 循环资源

Stockholm, Stockholm Royal Seaport  
瑞典斯德哥尔摩，皇家海港区域



- **减少垃圾**——面向家庭和企业的源分流垃圾收集系统：
  - 用于有机垃圾的研磨机
  - 用于有害垃圾的自动回收站
  - 用于塑料、报纸和其他垃圾的真空垃圾收集系统
- 2019年皇家海港人均残余垃圾量显著降低，达到85kg/年，比该市其他地区低54%。



# Green & nature-based solutions | 绿色和基于自然的解决方案

## Shenzhen, Yantian Dameisha Community 深圳，盐田区大梅沙社区



Key strategy | 关键策略：

**Building climate resilience | 增强气候韧性**

- 通过“海绵城市”改造工程，建设海绵社区，加强雨洪管理，大大提高了社区的抗灾能力
- 实施大梅沙海滨公园生态修复工程，综合考虑台风、海岸侵蚀等气候风险和灾害，增强社区韧性





## Sustainable Lifestyle | 可持续的生活方式

### Milan, L'INNESTO 意大利米兰，伊内斯托社区



- 意大利首个零碳保障性住房社区项目
- 采取以下行动鼓励居民采用可持续生活方式，降低社区消费碳排放：

- 能源展厅：社区能耗监测及居民节能建议平台

- 社区食品中心

- 循环经济区：社区“零废物商店”

- 开放共享的社区居住模式：供公共使用的客厅和厨房，以及建筑物底层的共享工作坊、花园、多元服务以及社区宾馆



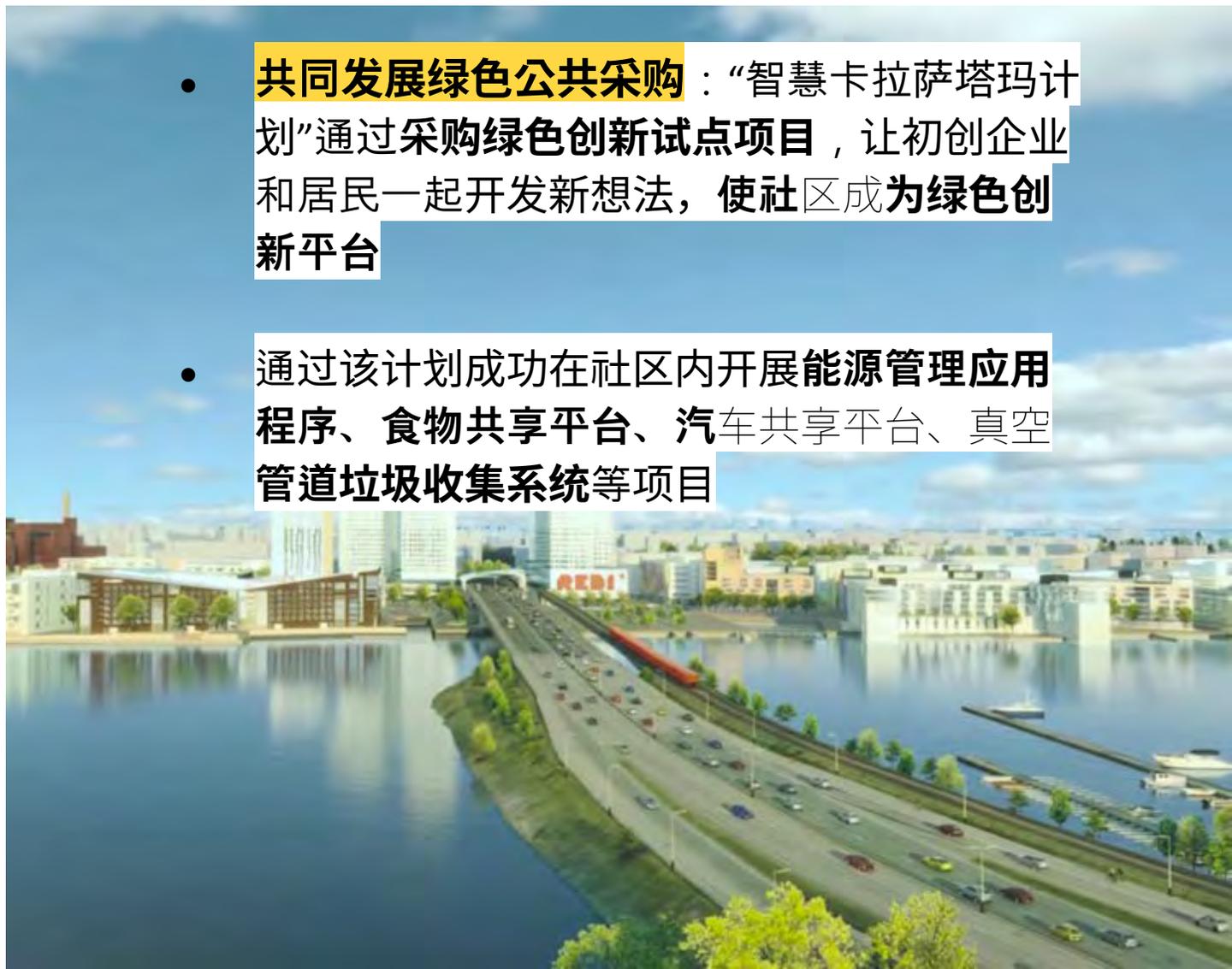


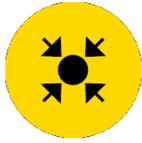
## Green Economy | 绿色经济

Helsinki, Kalasatama  
芬兰赫尔辛基，卡拉萨塔玛区



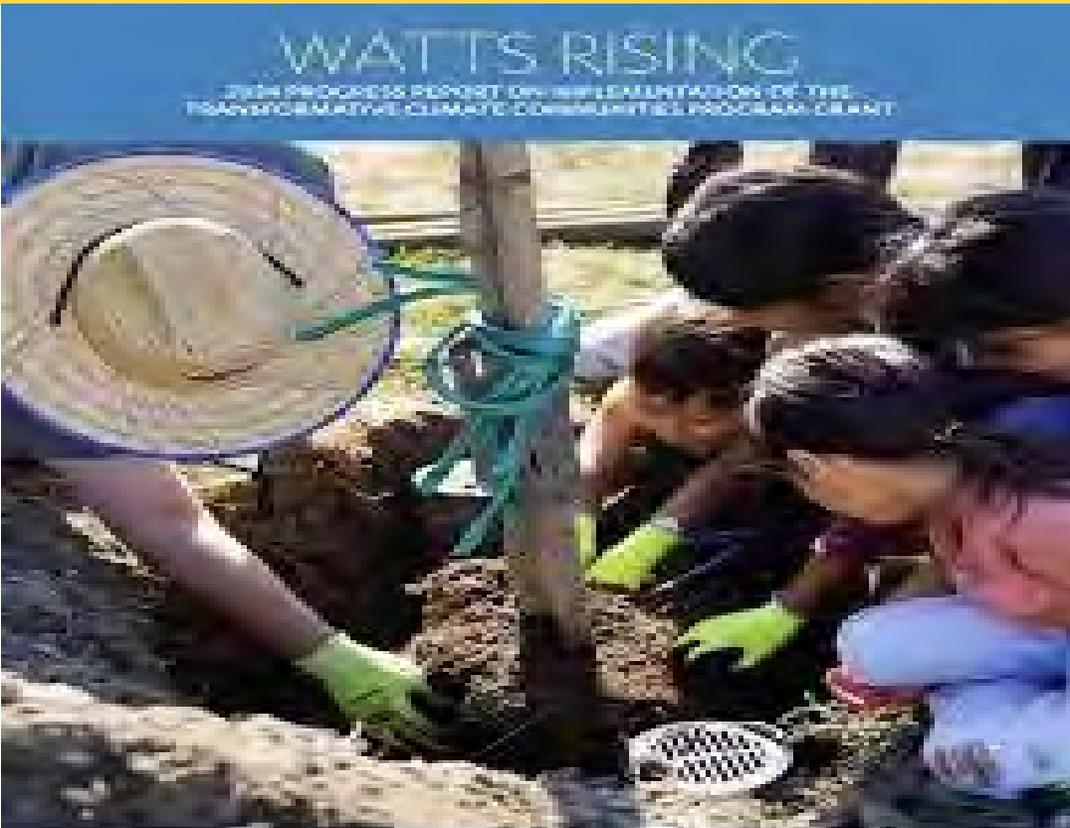
- **共同发展绿色公共采购**：“智慧卡拉萨塔玛计划”通过**采购绿色创新试点项目**，让**初创企业和居民**一起开发新想法，使**社区成为绿色创新平台**
- 通过该计划成功在社区内开展**能源管理应用程序、食物共享平台、汽车共享平台、真空管道垃圾收集系统**等项目





# A Place for Everyone | 包容共享

Los Angeles, Watts Rising Transformative Climate Communities  
美国洛杉矶，瓦茨崛起转型气候社区



- 针对洛杉矶市最贫困的社区之一开展的改造项目
- 针对社区250个家庭的房屋进行了免费的节能改造和太阳能光伏板安装服务以提高其房产价值，降低家庭支出，增加家庭财富
- 举办租户权利意识和法律教育讲习班，使居民能够掌握足够的知识来打击非法房东的做法

# Green & Thriving Neighbourhoods : Global Guidebook + China Paper

## 绿色繁荣社区：全球指南 + 中国专篇



**C40 Green and Thriving Neighbourhoods Global Programme**  
C40绿色繁荣社区全球项目



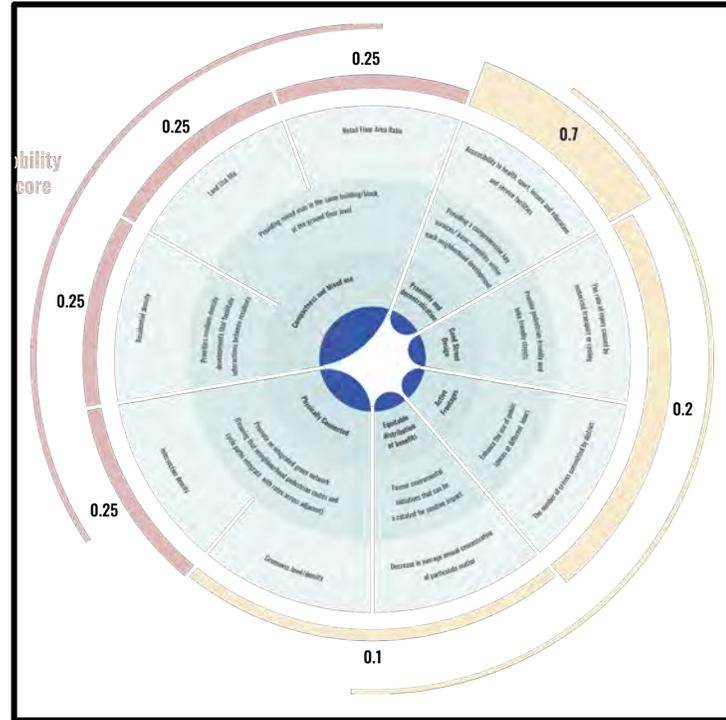
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2019

# Green and Thriving Neighbourhoods Activities

## 绿色繁荣社区活动



We **share knowledge and best practices** in a **network of 50+ cities** and **platform leading cities** for **advocacy and leadership**

分享知识与最佳案例

We **develop research and tools and build** alliances with leading stakeholders, academics and youth

开展研究与工具，构建协作联盟

We **support the implementation of 24 pilots** at the neighbourhood scale  
支持24个试点项目的实施

# A Global Forum of 50+ cities 全球论坛

## Regional events 区域活动 (中国)

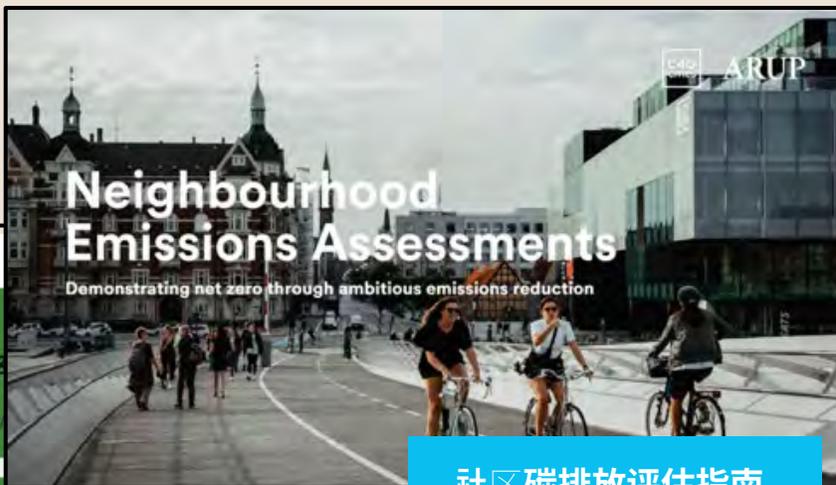


C40绿色繁荣社区年度中国区域论坛及其他线上/线下相关活动



# Global Forum 全球论坛

## Technical Resources 技术资源



社区碳排放评估指南



绿色繁荣社区全球案例库  
<https://gtn-caselibrary.org.cn/>

URBAN SH/FT CITY ACADEMY ABOUT URBANSHIFT COURSES SIGN IN REGISTER

### GREEN AND THRIVING NEIGHBOURHOODS

Explore how to develop green and thriving neighbourhoods in your city with an integrated vision, a set of design strategies, and a step-by-step delivery roadmap.

By emphasizing the importance of local context, design, and integration, this course will inspire you to think differently about neighbourhoods and provide the necessary tools to take action.

Available In:

English | French | Portuguese | Spanish | Bahasa | Mandarin

Green and Thriving Neighbourhoods – Course Teaser

Watch on YouTube

UN environment programme UN-HABITAT C40 CITIES URBAN MORPHOLOGY & COMPLEX SYSTEMS INSTITUTE ARUP

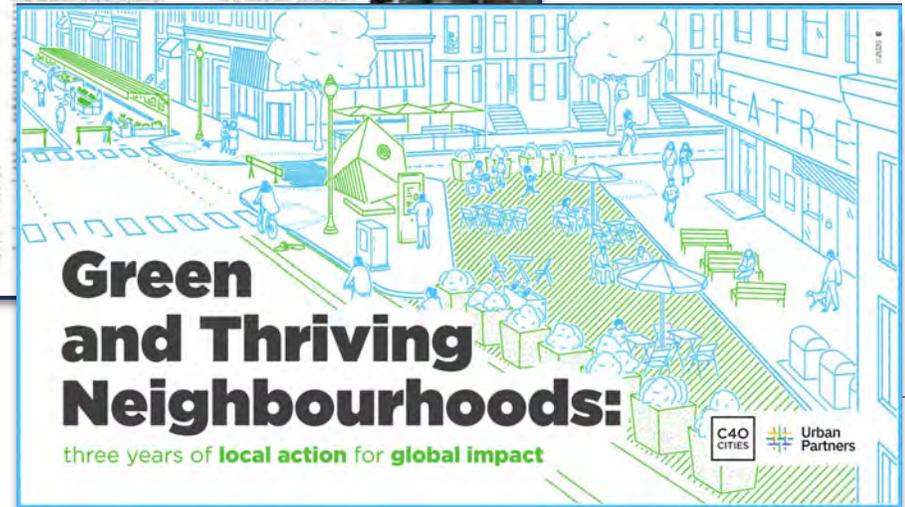
“绿色繁荣社区”  
全球公开课  
(C40与联合国环境署、人居署等联合开发)

# Check out the 26 pilot profiles to learn more!

## 扫码查阅26个试点项目简介，了解更多信息！



# New report 最新报告



# Accelerating Net Zero and Community Health in Jernbanebyen District, Copenhagen

加速实现净零排放与社区健康发展：哥本哈根耶恩班尼拜恩城区实践

- Transforming one of the **last main areas for urban development in Central Copenhagen** into a **beacon of zero-carbon, people-centred area**
- **Energy transition and low-carbon construction materials**
- A neighbourhood built around a **network of open green spaces** for physical and mental health.
- A **partially car-free district** to promote active lifestyles and local meeting places.

- **High percentage of affordable housing**



Sustainable  
Lifestyles



Complete  
Neighbourhood



Green energy  
& buildings



Place for  
Everyone





## Implementation in Copenhagen 哥本哈根实践



# Transforming port lands into a sustainable waterfront community - Ookwemin Minising in Toronto

港口用地转型为可持续滨水社区：多伦多 Ookwemin Minising 项目

- 40 hectares of former port lands are being transformed into a **dense, walkable, mixed-use** waterfront community, with **thousands of new homes**, including affordable rental housing.
- Ookwemin Minising is envisioned as a **zero carbon**, with **energy-efficient building design and renewable energy sources**.
- There is a focus on **circular design with reduced embodied carbon in buildings**
- **Resilient and nature-based design**



Green energy  
& buildings



Complete  
Neighbourhood



Circular  
Resources



Place for  
Everyone



Green & Nature-based  
Solutions



# Integrating sustainability, community, and economy – Beihu Street in Wuhan

融合可持续发展、社区建设与经济活力：武汉北湖街片区

- Deploying **rooftop solar on existing residential buildings**, with an **innovative business model** that benefits multiple stakeholders
- Developing **energy trusteeship programmes** for public institutions in municipal office buildings.
- Organising **free handicraft workshops** for unemployed women on wasted materials re-design and establishing a **recycling online-market**.
- Exploring a **GTN public welfare fund**, attracting and introducing green industries and business to drive economic growth and green job opportunities.



Green energy  
& buildings



Circular  
Resources



Green  
Economy



Sustainable  
Lifestyles



A Place  
For Everyone



# Green innovation and AI integration – Bailuwan Future Park Community in Chengdu

绿色创新与人工智能融合：成都白鹭湾未来公园社区

- **High-standard design and planning** which integrated green technologies across 7 key areas: **industry, lifestyle, ecology, architecture, energy, water, waste management, and operations.**
- Key strategies include: Natural ventilation corridor; Zero-carbon transportation systems; Ecological preservation and carbon sequestration systems; Near-zero-carbon buildings with full lifecycle consideration
- As a pilot zone for national AI innovation, the park fosters a **low-carbon industrial ecosystem** and creates green jobs through **green enterprises powered by AI.**



Green energy  
& buildings



People-centered  
Mobility



Clean  
Construction



Green & Nature-based  
Solutions



Green  
Economy



Let's build a Green and  
Thriving future together!

携手共建绿色繁荣未来！

