Improving Transportation Demand Management through Sustainable Urban Planning and Design: Recommendations from International Green Model City Initiative (IGMC)

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Aims of IGMC Initiative

- IGMC Initiative advocates IGMC Standards 3.0 as an advanced planning tool;
- IGMC provides an innovative concept, integrated strategies and methodologies, benchmarks and a monitoring framework;
- IGMC facilitates demand-oriented solutions and guidance for sustainable urban development;
- IGMC facilitates sustainable cities and human settlements for all, in support to the implementation of *SDGs* and *New Urban Agenda;*
- *IGMC* creates a new shared platform for the global stakeholders.

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International Green Model City Initiative

An advanced tool for assessing and guiding sustainable urban development

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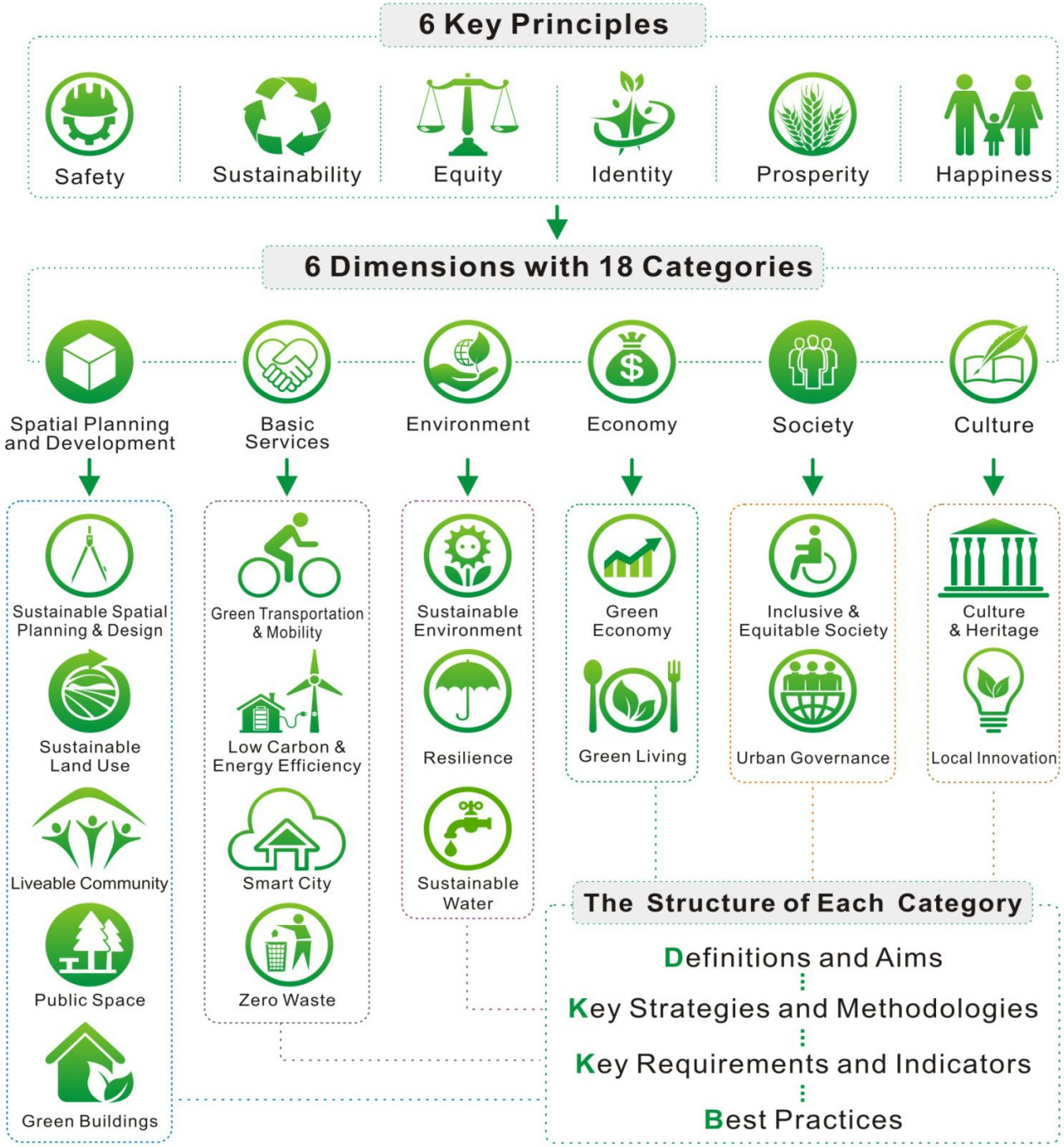
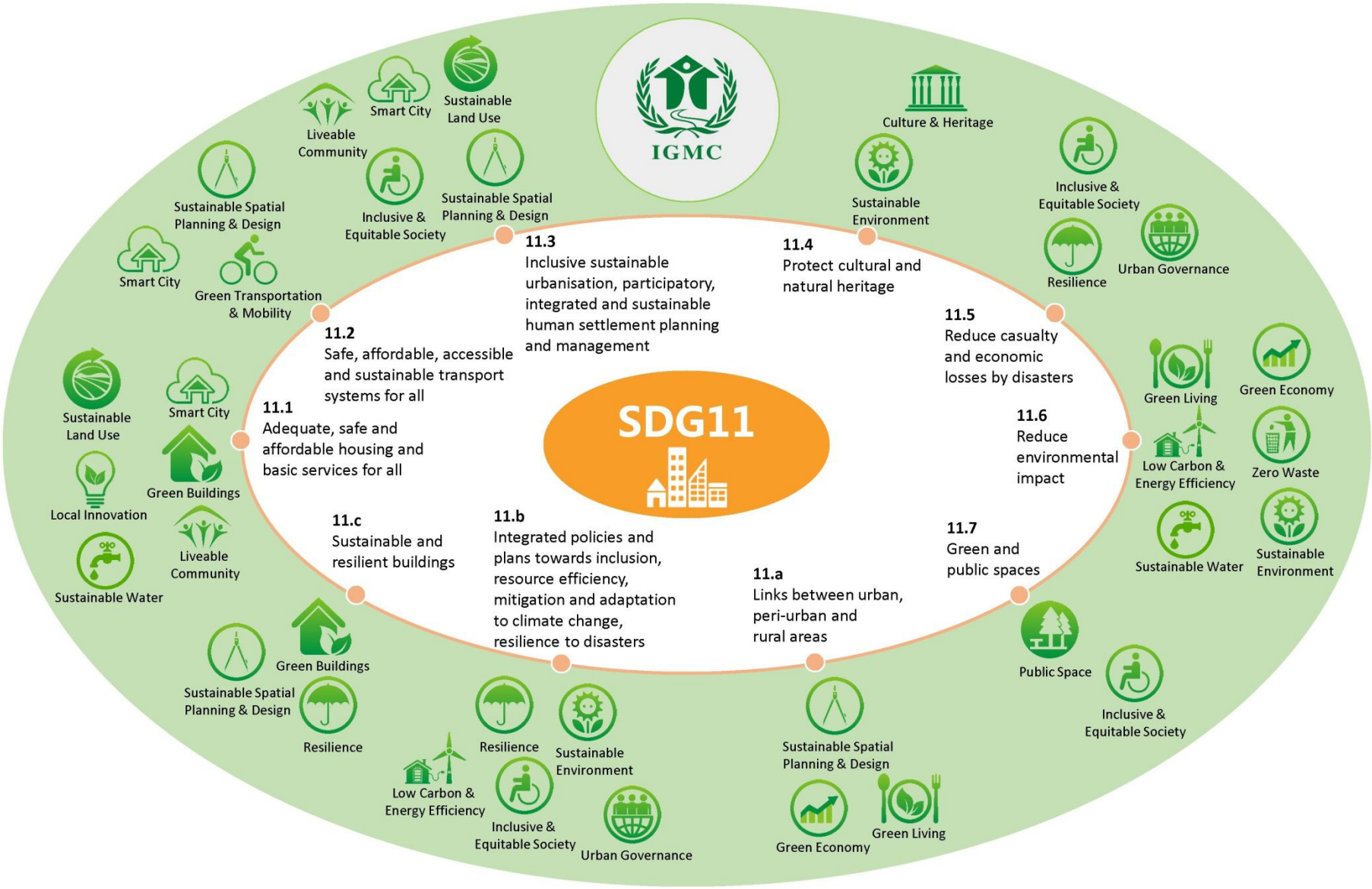
IGMC 3.0 Releasing Ceremony During Habitat III

Commited to Sustainable Cities and Human Settlements For All


6 Key Principles
Safety
Sustainability
Equity
Identity
Prosperity
Happiness
6 Dimensions with 18 Categories
Spatial Planning and Development
Basic Services
Environment
Economy
Society
Culture
Sustainable Spatial Planning & Design
Sustainable Land Use
Liveable Community
Public Space
Green Buildings
Green Transportation & Mobility
Low Carbon & Energy Efficiency
Smart City
Zero Waste
Sustainable Environment
Resilience
Sustainable Water
Green Economy
Green Living
Inclusive & Equitable Society
Urban Governance
Culture & Heritage
Local Innovation
The Structure of Each Category
Definitions and Aims
Key Strategies and Methodologies
Key Requirements and Indicators
Best Practices

Relevance between IGMC and SDG11



IGMC Standards 3.0

- ….. among other elements:
- IGMC Standards support walkable neighbourhoods and green mobility, reducing unnecessary traffic through Sustainable Urban Planning and Design.

Sustainable Urban Planning and Design Strategies

The Compact City model and Transit-Oriented Development

Benefits of compact urban growth:

a. Avoids the hidden costs of sprawl
b. Reduced infrastructure costs
c. Improved land-use efficiency
d. Lower transportation costs
e. Better protection of natural resources
f. Reduced car dependence and transportation energy demand
g. Decreased carbon emissions
h. Cleaner air
i. More equitable access to services and jobs
k. Inclusive access to mobility

Implementing the compact city model and transit-oriented development involves:

a. Promoting compactness, polycentrism and contiguity of urban development,

b. Establishing and enforcing an urban growth boundary.

c. Planning according to TOD principles,

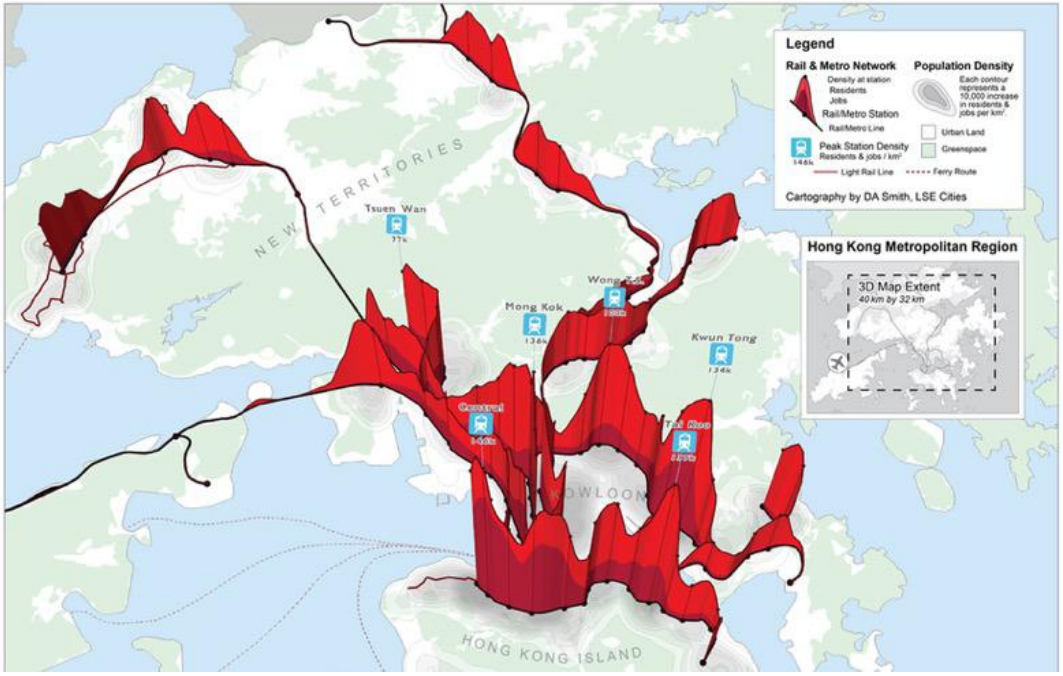
d. Supporting TOD by Smart Mobility Technologies,

e. Promoting public transportation and walking as the primary forms of mobility,

f. Providing safe and well-connected pedestrian spaces within dense, mixed, and accessible neighbourhoods interconnected by public transport,

f. Financing Urban development with land value capture.

Best Practice: Hong Kong Transit-Oriented Development: Decoupling economic growth and resource use by shaping a high density urban form supported by transit



Population density along major transit routes in Hong Kong. Source: LSE Cities.

Two key concepts of Hong Kong Spatial Planning include a "rail-based pattern" of development and prioritizing regeneration of existing urbanized territory rather than expansion into greenfield areas.

Best Practice: Copenhagen

Spatial Planning and Development. Copenhagen has outstanding green land use policies. The city land use policies are based on the ongoing redevelopment of brownfield sites and the widespread availability of and accessibility to green spaces (almost 80% of residents in the municipality of Copenhagen live within 300 meters of a park or recreation area). Between 2000 and 2009, 80% of new developments were built on brownfield sites.

Sustainable Urban Planning and Design Strategies

Mixed-use small blocks with dense grids of streets

Benefits of mixed-use:

a. Increases in property value.
b. Saves households money.
c. Improves air quality.
d. Reduces car use.
e. Optimizes energy use.
f. Reduces likelihood of obesity.
g. Increases access to amenities.

Mixed-use small blocks with dense grids of streets

B. Benefits of small blocks:

a. Saves costs on infrastructure.

b. Decreases energy use.

c. Reduces congestion.

d. Increases accessibility and safety.

e. Increases retail space.

f. Draws talent.

g. Flexibility in land development finance.

h. Enhance sense of community.

Key Strategies and Methodologies: Mixed-use small blocks with dense grids of streets:

a. Planning for multi-functional mixed-use neighbourhoods,
b. Planning and designing small blocks,
c. Ensuring visually active frontage,
d. Planning dense networks of connected streets designed as places for people,
e. Using one-way street couplets and limiting street width,
f. Providing active setback areas,
g. Using local and context-driven planning models,
h. Designing of the urban fabric with bioclimatic principles.

Best Practice: Liuyun Xiaoqu: a walkable, mixed-use neighbourhood in Guangzhou

This photo shows first- floor commercial spaces in Liuyun Xiaoqu with residential spaces on the upper floors. The mixed-use space is improved by plants, pedestrian sidewalks, and restrictions of car use.

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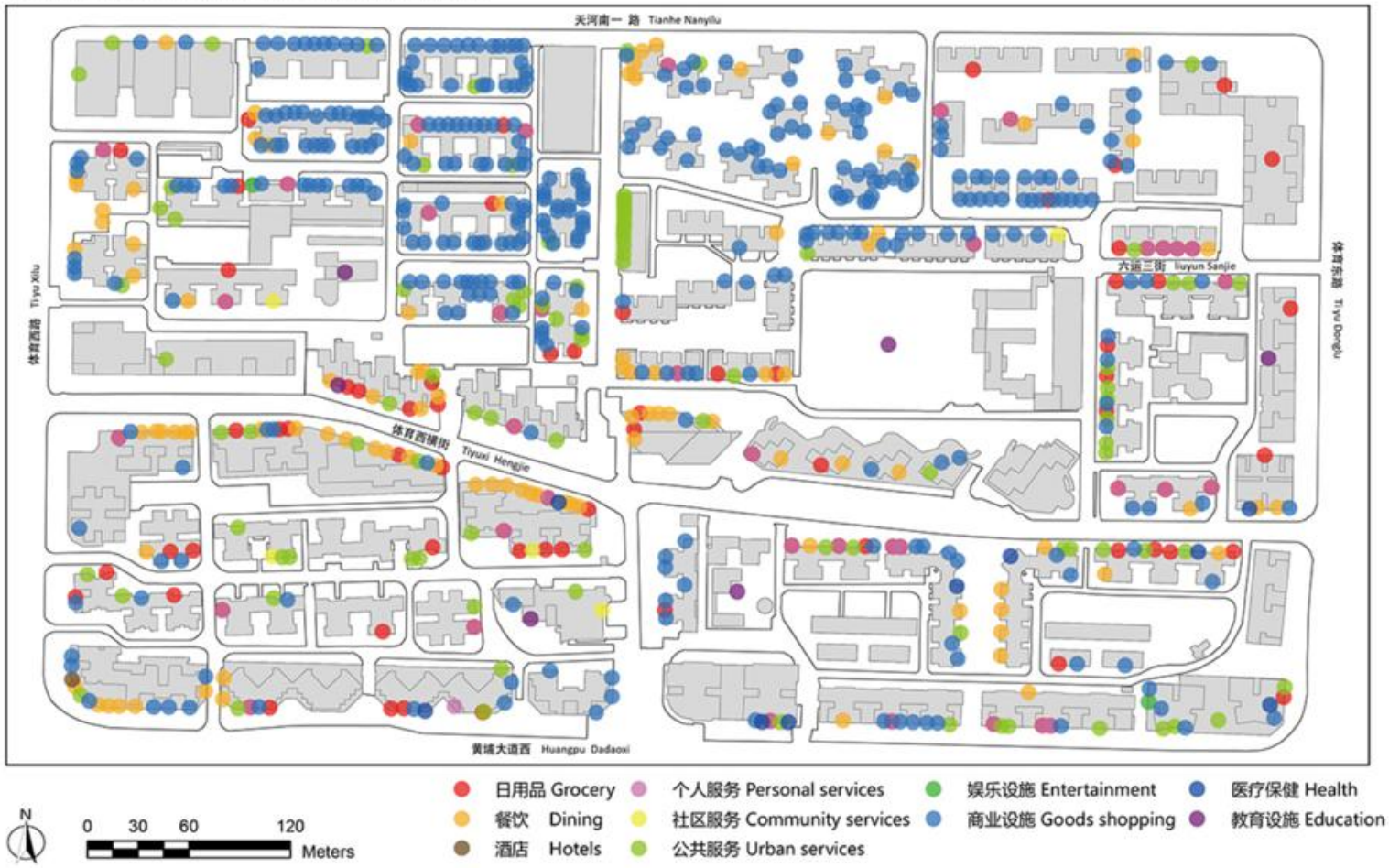
六运小区商业分布图
Commercial Distribution of Liuyun Xiaoqu



(Source: ITDP)

Benefits of Joining the IGMC

(1) Participants can use the IGMC Standard for assessment and diagnosis, identify challenges, gaps and opportunities, reduce risks and promote the effective investment;

(2) Participants can develop local action plans and policy options with measurable goals through the IGMC Standard;

(3) Participants can access IGMC data system, learning from each other and comparing experiences with counterparts;

(4) strengthen capacity building through various trainings, workshops and activities, obtaining professional information;

(5) obtain demand-oriented solutions and inter-active consultation services to address existing challenges and gaps in certain cities and projects.

(6) conduct IGMC pilots as appropriate to demonstrate the green transformation;

(7) build up new type partnerships, and

(8) enhance the brand value and maximize business opportunities.

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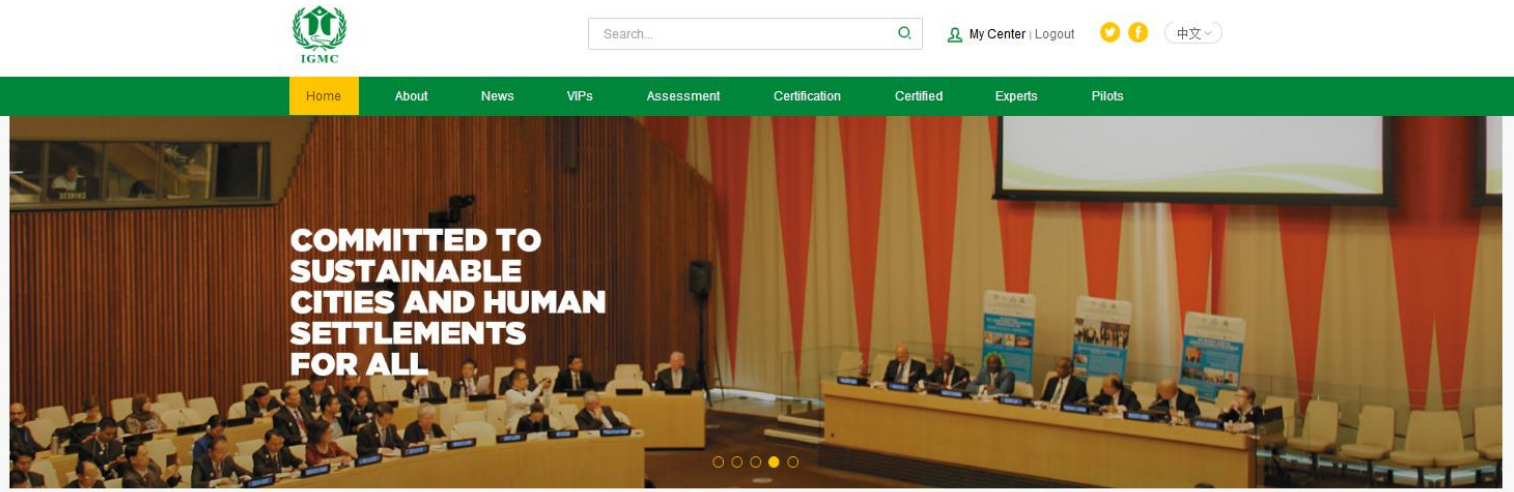
IGMC Assessment and Certification Online System: www.igmci.org




Assessment


Experts


Pilots


12th Global Forum on Human Settlements and 2017 SCAHSA Awards Ceremony Was Successfully Held at One UN Plaza, New York

11th Global Forum on Human Settlements Was Successfully Held in Quito,Ecuador

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Liuyun Economic and Technological Development Zone joining the "International Green Model City Initiative pilots"

Commited to Sustainable Cities and Human Settlements For All

You are welcome to Join the IGMC Initiative

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