

Global Platform for Sustainable Cities

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I. GPSC Overview

Global Platform for Sustainable Cities

A forum for knowledge sharing and partnership to achieve urban sustainability









Global Platform for Sustainable Cities



GPSC: Knowledge Platform (\$10m by GEF for Piloting Phase)

- Supporting Integrated urban planning and financing
- Connecting cities
- Forging a shared vision for urban sustainability

- Geospatial data/urban sustainability indicators
- urban growth scenarios
 - Urban Sustainability Framework
 - vision, diagnostic process and plan for action
- Improving municipal financing
- Investment pipeline



GPSC-IAP Structure



Supporting a Value Chain of Urban Development



An Integrated Approach to Smart City and Urban Sustainability

• GPSC's Urban Sustainability Framework (USF):

- A guidance document to support cities for an integrated approach to urban strategy, finance and implementation
- Consolidating approaches adopted by different initiatives and bringing together a shared vision and a common framework



GPSC: Urban Sustainability Framework



Urban Sustainability: Outcome Dimensions

Outcome Dimension	Goal		
Urban economies	Attain sustainable economic growth, prosperity		
	and competitiveness across all parts of the city		
Natural environment and	Protect and conserve ecosystems and natural		
resources	resources into perpetuity		
Global climate and resilience	Work towards curbing the impacts faced by		
	climate change and encouraging the overall		
	resilience of cities		
Inclusivity and quality of life	work towards creating inclusive cities and		
	improve liveability of cities, focusing on		
	reducing poverty levels and inequality		
	throughout cities		

Urban Sustainability: Enabling Dimensions

Enabling Dimension	Goal
Integrated urban	Achieve integrated, well-planned urban
Planning	Development
Governance and fiscal	Ensure accountable governance and fiscal /
Sustainability	Sustainability





OUTCOME DIMENSIONS

INCLUSIVITY & QUALITY OF LIFE

Key focus areas:

- Housing
- Education
- Equality
- Poverty & hunger elimination
- Food & nutrition
- Drinking water & sanitation
- Basic physical infrastructure
- Health & wellbeing
- Safety
- Social cohesion

GLOBAL CLIMATE & RESILIENCE

Key focus areas:

- Greenhouse gas inventory
- Energy efficiency
- Clean energy
- Climate change adaptation
- Disaster risk reduction

NATURAL ENVIRONMENT & RESOURCES

Key focus areas:

- Ecosystems & biodiversity
- Air quality
- Water resources management
- Solid waste management
- Consumption & production patterns

URBAN ECONOMIES

Key focus areas:

- Economic performance
- Economic structure
- Financing mechanisms
- Innovation & entrepreneurship
- Labor force
- Livelihood opportunities
- Income equality
- Global appeal
- Connectivity

Three Stage USF Process



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II. GPSC Support To Cities



GPSC-City-level Projects needs to be delivered as one program (1)

- Types of GPSC Support to Cities:
 - Joint Undertakings between GPSC and City Level Projects Supporting Cities to:
 - O Undertake rapid assessment on urban sustainability and benchmark with good practice
 - Providing modeling tools for urban growth scenarios including TOD scenarios
 - Define vision and formulate/enhance its urban sustainability action plans and interventions

GPSC-City-level Projects needs to be delivered as one program (2)

- Types of GPSC Support to Cities:
 - Knowledge Products:
 - \circ Urban Sustainability Framework (to be launched in October 2017)
 - Rapid Assessment Framework
 - o TOD Implementation Manual (to be released in Summer 2018)
 - \circ Growth Scenario Modeling tool (with particular focus on TOD available in November 2017)
 - $\,\circ\,$ Geospatial tools for urban planning (under preparation)
 - $\,\circ\,$ Municipal PPP Guidance (under preparation)
 - $\circ\,$ Good urban practice compendiums
 - $\,\circ\,$ California: Integrating Climate Change Action into Development Strategy
 - Training, Workshops and Annual GPSC meetings
 - $\,\circ\,$ First Annual Meeting: March 2016 Singapore
 - $\,\circ\,$ Second Annual Meeting: October 30 to 1 November, New Delhi, India
 - $\,\circ\,$ GPSC working groups meetings
 - \circ Regional Training
 - GPSC Web: to be launched in September 2017
 - $\,\circ\,$ Country page to be managed by the relevant agency/country team

Drawing Lessons from WB Work in Chongqing: Chongqing: A Global City by 2040

Example: Chongqing 2040

- Benchmarking Chongqing with other global cities:
 - Compact and Efficient Urban Development
 - The base for skilled human capital
 - Innovative capacity
 - A robust economic growth led by strong and diversified industry
 - Connectivity and mobility for regional and global economic integration
 - A green, environmentally friendly city with efficient resource use
 - An inclusive city
 - High quality of life with vibrant city life and cultural interaction

Growth Projections Scenario Drivers Four Scenarios

Chongqing 2040 Scenario Concepts

Four Scenario Concepts

	Scenario	Land Development	Growth	Urban Form
A	Past Trends	Expansive growth throughout nine districts	Employment focused in Core and development dispersed throughout nine districts	Superblocks of high and low density
В	Master Plan Extension	Clustered growth throughout nine districts	Employment focused in Core and development in clusters throughout nine districts	Superblocks and TOD at varying densities
С	Master Plan Extension, Coordinated TOD Implementation	Focused growth around transit stations	Job growth balanced with housing in Core and TOD clusters	TOD at higher densities
D	Limited Expansion	Focused growth in Core and Core Periphery	High density job growth in balance with housing in Core and TOD clusters in Core Periphery	TOD at highest densities

Chongqing 2040 Report

Four Parts:

1. A growing City: Achievement over the past 20 years and challenges ahead

2. Where the city stands: Assessing sustainability

3. A Pathway for the future: urban growth scenarios

4. Toward a global city: Recommendations

Rapid Assessment for Melaka

• Purpose:

- Help Melaka identify gaps to support its 2035 Action Plan
- Leverage financing and investment

• Scope

- Economy (GDP, economic efficiency, competitiveness)
- Environment sustainability and resource efficiency
- Social inclusiveness
- Municipal financial sustainability
- City's unique identify and urban fabrics

Outcome

Recommendations for policy interventions and investment options

Process and Approach

- Initiation: Commitment by city leadership for carrying out rapid assessment
 - A letter sent to WB as well as the Implementing Agency
 - Appointing a focal point responsible for the process
- Focal points and local experts/consultants to liaison with WB/Implementing agency to identify areas of the priority for the assessment and data availability
- Desk review by a team of experts led by the WB
- Face to face meetings between WB-led expert team and various city agencies
- Consultations and finalization of the assessment and recommendations
- Discussion on follow-up action and areas for further support
- Expected timing for assessment: 3 to 6 months

• GPSC support – Rapid Assessment, Growth Scenario Analysis and Sustainability Action Planning is available for all interested cities

Part III GPSC Second Annual Meeting

- October 30 to November 2, New Delhi

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Framework for Assessment

1. Achieve Growing, Prosperous and Competitive economy

Key indicators

- Economic performance (GDP, etc)
- GDP density (including population growth projection
- Economic structure
- Productivity
- Infrastructure (for competiveness)/ICT
- Labor force (dependency rate and aging population)
- Labor market (unemployment/informal employment)
- Innovative capacity (R&D and labor force education level)

Key questions

- What is the natural growth rate of the population? Is there inbound or outbound migration?

- Do you perceive population density as low, normal, excessive? What is the average living space per person?

- Are there sufficient people in the working age group who can support the dependent population?

- Has the labor force participation rate increased or decreased over the last years? If yes what are the reasons?

- Does the educational attainment of the labor force support a service economy?

Key questions

- Is the GDP growth rate sustaining or declining and in both cases what are the main drivers of growth or decline?
- Do you think the city needs a transition towards new drivers of growth?
- Is the city economy and the engines of growth concentrated in specific areas or spread out on vast territories? What is the city policy about jobs? Concentrating them at nodes of high accessibility in a transit system or spreading them in economic zones that can be far away from the traditional city center?
- What are the policies to attract FDI?
- Is there regional integration? What form does it take?
- What has been the sectoral evolution of the city's economy? Is the city deriving economic growth from a few sectors or has it diversified during the last decades? Additionally, is the education level of labor force high enough to support moving up value chains in global markets?
- Do you monitor key data assessing local innovation and do you have measurable goals for increasing local innovation?

2. Optimizing Land management and use to improve efficiency and livability

Key Indicators

- Land use and urban expansion
- Urban built-up area growth (time series)
- Built-up land area per inhabitant
- Urban containment: Percentage of population growth in the urban core/percentage of population growth in the periphery
- Existence and active implementation of a master land use plan
- Urban form
- Urban design (walkability, street-level activity, parking lot area, road width, sidewalk width and continuity.
- Green and recreational areas (green space ratio, recreation area ratio)

Key questions

- Do you monitor urban built-up land growth with remote sensing? Are there series of maps and time series of land growth? Alternatively, do you monitor land growth with cadastral maps.
- Is there a GIS database? Is it integrated and cross sectors? Is it used to support planning efforts?
- When was the last master plan produced? What is the covered period?
- Is there an ongoing or programmed master plan update?
- How is coordination between different urban agencies organized for producing/updating master plans? How do you integrate assumptions about demographic growth, economic growth, job locations, transport planning and heritage preservation in the master plan?

3. Sustainable urban mobility and connectivity

Key Indicators

- Length of public transport network, in km per square kilometer of city area and in km per 100,000 inhabitants
- Percentage of population living less than 500m/1km from a mass transit station
- Percentage of jobs located less that 500 m/1 km from a mass transit station
- Average commuting time from residence to work
- Size of non-car transport network (bicycle path)
- Interconnectivity (airport, rail/road, port, etc)

Key questions

- What is the mode share of public transport and what are the city policies to develop public transport?
- Do you have coordination mechanisms policies, and incentives to encourage density increases and firms' locational choices around transit stations?
- What is the average commuting time and is it perceived as satisfactory by the population?
- Do you have policies to encourage cycling (bike paths, safety increase, amenities, etc.)?
- Are there ongoing intermodal hubs projects (for example bus and rail, rail and port)? What are amounts of investments? What are calculated sustainability and economic benefits for the projects themselves and the global economic benefits for the city?
- Do you use ICT in urban services planning, delivery and management?
- Do you have plans to increase the use of ICT in the future?

4. Environmental sustainability and Resource efficiency

Key Indicators

- Energy Use and Efficiency
- Renewable energy consumption
- Water use, consumption, quality
- Solid waste
- Wastewater treatment
- Waste recycling
- Air pollution

Key Questions

- What are trends in energy use per capita and per GDP? Are there specific policies at city scale to reduce energy use per capita and energy intensity of the economy?
- What are the city policies for energy efficiency in buildings? Does the city develop low carbon or Net Zero Carbon demo buildings with a circular metabolism-based design? Data on percentage of renewables (present, past trends, and future goals)
- What are the city goals, policies and incentives for increasing the share of renewable energies?
- Data on water consumption: What is the compliance with national standards? -
- Percentage of recycling. What are the barriers and policies for infrastructure and people behavior for separating waste?
- How is concentration of these air pollutants measured and monitored?
- -What are measures taken both for reducing source emissions and for protecting public health?
- What is the average area of green spaces per person? What are policy targets?
- Have you mapped accessibility to green spaces for the population and have you a policy to increase it?

5. Achieving low carbon and climate resilience

Key Indicators

- CO₂ emissions
- Sensitivity to natural disasters in the context of climate change
- Preparation to natural disasters in the context of climate change

Key Questions

- Does the city monitor its CO2 emissions with an emission inventory?
- Has the city set an emission reduction target with a mitigation plan and how does the city monitor progress towards achieving the target?
- Is disaster risk management integrated in city planning (land, use, transportation, water, in particular)?
- Are citizens aware and engaged in contingency plans in case of natural disasters?

6. Inclusiveness and equity

Key Indicators

- Poverty
- Income inequality
- Housing
- Housing affordability index
- Social Mix
- Population living in informal settlements
- Transportation affordability
- Access to education
- Higher education
- Security and violence
- Level of health
- Provision of health services
- Access to electricity
- Access to water network
- Sanitation coverage: Population with access to improved sanitation

Key questions

- How is the poverty line defined? What is the percentage of population living near of below the poverty line? what are policy measures targeted at these populations?
- What is Gini coefficient in your city compared to national average?
- Are there specific policies to reduce income inequality?
- Is there a quantitative housing shortage?
- How is the housing policy dealing with the shortage if there is one?
- Is the housing policy providing dwellings close to transit in order to enhance job opportunities for the population?
- What is the Housing Affordability Index in your city?
- How is the housing policy contributing to improve the affordability housing with sustainable housing in complete accessible communities?
- Are there specific policies to ensure social mix in neighborhoods by providing different types of housing including for example a percentage of affordable housing?
- Are there informal settlements and what are policies (social, economic, and housing) to address these populations?
- What is the adult literacy rate? Are there specific policies to improve it if it is low?
- Are there policies to attract national or world class universities?

Key questions

- Is there crime and is it increasing or decreasing? What are the policies to prevent and decrease crime prevalence?
- What is life expectancy in the city compared to national and international benchmarks? How would you explain significant differences if there are any?
- What is medical coverage in the city? Is it easily and equitably accessible to all residents? Is it affordable for all?
- What is the electricity city coverage? Are there policies specifically targeted to nonconnected populations?
- What is the household connection coverage to the city water network? If insufficient, are there policies to increase it?
- Percentage of population connected to sanitation and policies to increase it if considered insufficient?

7. Urban planning and governance

Key Indicators

- Existence of vision and long-term planning and strategy
- Level of implementation of the long-term plan
- Coordination and data sharing among different agencies
- Existence of electronic systems for tracking the municipality's management
- Consultation and public participation in urban planning and developing urban strategy

Key questions

- Is there a long term strategic vision for the city future? What is the time frame? Is it implemented through action plans revised with what periodicity?
- Is this vision addressing cross-cutting issues and integrating sectors?
- What is the process followed for organizing inter-agency coordination?
- What are data platforms supporting the planning effort? Are they transparently shared by various agencies?
- How is the municipality management tracked?
- How is citizens' engagement in urban planning and strategy organized? Is it a wide and active engagement at planning stage?

8. Sustainable municipal finance

Key indicators

- Credit rating on the national rating scale
- Revenue and financial autonomy
- Expenditure management
- Adequate management of debt and other obligations

Debt service ratios (%)

- Ratio of annual debt service payments to total annual operating revenue.
- Ratio of annual debt service payments to annual own source revenues.
- Ratio of annual debt service payments to the Operating Margin when debt service is excluded from total operating expenditures

Debt growth (%)

- Average annual rate of growth of the debt in the last three years
- Growth rate of short-term debt
- Growth rate of long-term debt
- Growth rate of revenues available for debt service

Key Questions

- What revenue sources are managed directly by the city and do these generate sufficient revenue to cover the city's operating expenditures?
- How are municipal taxes collected and what percentage of taxes due is actually collected?
- Are there revenue sources (own sources or transfers) that are dedicated to specific expenditures in either the operating or capital budget?
- Is the city financially autonomous or heavily dependent from other levels of government for its overall financing or for financing some sectors of its development?

Key Questions

- Does the city have operating and capital investment plans that guide the preparation and execution of annual operating and capital budgets?
- Does the city have an Operating Margin surplus of operating revenues (own source and transfers) over operating expenditures?
- Has the city experienced any cash shortages during the last several fiscal years, and if so, how were they managed?
- How is budget execution tracked? Are there measurable indicators and goals?
- Are the city finances at risk due to contingent liabilities?
- What are the city's present debt service ratios?
- Do these ratios indicate that current debt is sustainable?
- Would additional debt be sustainable?

9. Global Appeal (Unique Identity, City Fabric, and Local Culture and Innovation)

- Number of World Heritage sites within 100km area
- Planning and design reflect local culture and characteristics
- For re-development, preserve historic blocks or cultural districts
- Number of large world class cultural events held
- Cultural resources: Number of museums, theaters and concert halls
- Attractiveness of shopping and dining options
- Number of visitors from abroad
- Number of international students
- Number of foreign residents

Key questions

- Are there protection areas in the master planning process?
- Is the unique cultural heritage used to promote the city and brand it as unique and livable?
- What is the city policy to increase its global appeal?
- Is there an effort to brand the city as a unique cultural destination with a rich cultural heritage?
- Is there a policy to attract visitors, international students, foreign residents?

For more information

https://collaboration.worldbank.org/groups/global-platform-for-sustainable-cities

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