



# **Capacity Building for Sustainable Urbanization in Asian Countries**

**Shanghai Manual:  
A guide for sustainable urban development  
in the 21<sup>st</sup> Century**

# Envisioning a sustainable city



- Visioning process
- Stakeholder engagement
- Backcasting for plan development
- Establishing goals, measuring progress
- Importance of an integrated approach
- Case studies: Sydney, Australia; Nairobi Kenya

# Visioning process

- Developing a *vision* is first step
- Numerous cities are developing 20-year sustainability vision-plans
- Create specific vision of what citizens want their city to look and feel like in ten, twenty, thirty years
- How the vision will become reality is not important at first
- Focus on overarching points of general agreement
- Launch peer review process with other cities



The City of Lowell  
and the  
Department of Planning and Development  
invite you to

## ENVISIONING A SUSTAINABLE LOWELL

Join us for a presentation on Lowell's past accomplishments and present efforts to build a long-term, citywide vision for sustainable development.

**Monday, June 20, 2011**  
from 6:00 – 7:30 pm at the  
Lowell Senior Center, 276 Broadway Street, Lowell

Translation into Spanish, Khmer, and Portuguese will be provided upon request.  
Please contact Allegra Williams at 978-446-7200 x1473  
one week before the meeting to request this service.

# Stakeholder engagement



- Planning processes based on public participation capture diverse interests of communities and businesses
- Include government, citizens, business, civil society, non-governmental organizations, experts, and representatives of urban poor
- Listen, learn, express views, find common ground
- Example: Stakeholders in Jakarta want to reduce traffic congestion, have pedestrian-only streets and sidewalks, and bike paths
- Example: participatory municipal budgeting puts citizens in charge of priorities for public works



# Learning from sister cities



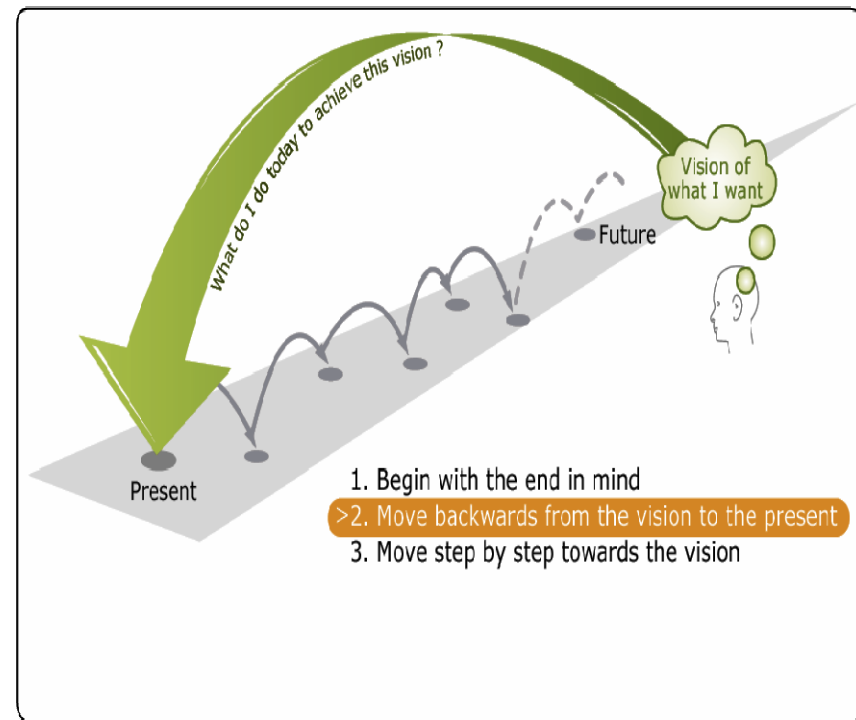
- Communicating with peers in other cities that have implemented similar projects can be informative
- Talking to people directly involved can lead to more candid responses and more realistic view of challenges faced
- Ask basic questions: “Does that project or program work well? Why or why not?”



# Backcasting to implement vision



- Forecasting: process of predicting future based on analysis of current trends
- Backcasting: opposite direction-- decide upfront what future you want, then make decisions and take steps to turn that future into a reality
- Helpful when problems are complex and present trends are part of the problems
- Asks, “What can we do today to reach that result?”
- Focus on guiding principles



# Portland Oregon: backcasting sustainability goals



Sustainability principle	End point goal – 20 years	10-year goal	5-year goal
Electricity: reduce GHG emissions; reduce consumption of fossil fuels	100% green power by 2020; 50% reduction in electricity use compared to 2007	75% green power; 35% reduction in electricity use	40% green power; 20% reduction in electricity use
Water: reduce depletion of aquifer reserves; reduce sewer overflows	Water use equals amount of water that falls on city annually by 2020	65% reduction in water use	45% reduction in water use

# Establish goals, measure progress



- If you can't measure it, you can't manage it
- Establish goals and measures to assess performance
- Examples:
  1. Water quality and water supply
  2. Food security
  3. Solid waste diversion, recycling and composting rates
  4. Access to parks and open space
  5. Air quality
  6. Access to education
  7. Health and family services
  8. Diversification of energy supply and reduction of energy intensity
  9. Housing affordability
  10. Growth of green economy, including products, jobs and services
  11. Resilience to natural disasters



# International Eco-city Framework and Standards (launched in 2010)



## URBAN DESIGN

- Access by Proximity: housing, transit, employment

## BIO-GEO-PHYSICAL CONDITIONS

- Clean Air, Healthy Soil, Safe Water, Material Efficiency, Renewable Energy, Healthy Food

## ECOLOGICAL IMPERATIVES

- Healthy Biodiversity, Keep within Earth's Carrying Capacity, Ecological Integrity

## SOCIO-CULTURAL FEATURES

- Healthy culture, Community Capacity Building, Equitable Economy, Lifelong Education, Quality of Life

ECOCITY  
BUILDERS



# Integrated approach

- Integrated strategy and management techniques that span traditional departmental “silos,” creating cross-discipline collaboration and efficiencies
- Example: urban transportation requires effective coordination of regional **land use**, planning for new **highways and roads**, access to the public transportation systems (**rail and bus systems**), and non-motorized transport options (**walking and bicycling**) through urban green belts (connected **public space and parks**)



# Case study: Sustainable Sydney 2030



## Vision: “Sydney people want a city....”

- “where people walk”
- “that tells its history”
- “with well-planned public transport”
- “which lifts the spirits”
- “that provides public access to the harbour’s edge”
- “with self-contained communities”
- “which is a place for people of all walks of life”
- “that is respectful of diversity—cultural, religious, age, gender, sexuality and family structure”





# Ten strategic directions

1. A globally competitive and innovative city
2. A leading environmental performer
3. Integrated transport for a connected city
4. A city for pedestrians and cyclists
5. A lively and engaging city center
6. Vibrant local communities and economies
7. A cultural and creative city
8. Housing for a diverse population
9. Sustainable development, renewal and design
10. Implementation through effective partnerships

# Ten goals or targets to be delivered by 2030



1. reduce greenhouse gas emissions
2. meet local electricity and water demand
3. develop additional housing
4. develop affordable housing
5. create 97,000 additional jobs
6. have 80 per cent of commuting by public transport
7. have 10 per cent of trips by cycling and 50 percent of trips by walking
8. every resident should be 10-minutes in walking from a main street
9. every resident within a three-minute walk within a “green link”
10. 45 per cent of people believing “most people can be trusted”

# Case study: Nairobi Metro 2030



## Vision of Nairobi Metro:

- Be best managed metropolis in Africa
- A robust, internationally competitive, inclusive economy
- Modern infrastructure to support development
- Strong national, regional and global linkages



# Competitive advantages



- Strategic geographic location that is a gateway to East and Central Africa.
- Host to many international corporations, development organizations and UN entities (UNEP, UN Habitat)
- Has invested heavily in institutions of higher education.
- Home to research organizations with global reputation
- Multi-ethnic diversity and culture
- Surrounded by national parks and nature sanctuaries that are global tourist destinations.
- Good weather year round.





# Challenges

- Non-competitive economy with old and decaying legacy industries
- Significant poverty with low human development indices, such as lack of housing and high unemployment
- Persistent resource scarcity, especially water and land
- Unfavorable investment climate hampers the private sector
- City management hampered by ineffective operational and financial performance, poor coordination, and inadequate budget
- Poor land use planning and management leads to conflicts and construction delays
- Transport options are inadequate to needs of population
- Low adoption rate of modern technologies
- Many neighborhoods and river systems are highly polluted
- High levels of crime mean insecure communities and business losses



# Plan elements

- Build a competitive economy with regional and global service hubs for business, trade and finance
- Foster tourism through investments in hotels, transport and crime prevention
- Develop industry and technology parks to spur manufacturing and technology uptake.
- Invest in infrastructure for water supply and sanitation
- Energy: Increase access to modern energy services



**Vision 2030 is our window of opportunity to achieve transformation in Kenya and is about where we want to be in the future. There are ample investment opportunities."**

WYCLIFFE  
OPARANYA  
MINISTER OF STATE FOR  
PLANNING, NATIONAL DEPT  
AND VISION 2030



# Plan elements (cont.)



- Waste management: strengthen efforts to collect, re-use and recycle waste streams; use only sanitary landfills
- Digital divide: develop ICT networks that support business, government, education and citizens.
- Urban mass transit: focus on investments in high occupancy buses and modernizing the existing commuter rail network.
- Housing: launch program to upgrade and eliminate slums





# Lessons learned

- Mayors of rapidly growing cities in developing countries face greater challenges on multiple fronts than their counterparts in developed countries.
- Poverty and the lack of adequate housing, energy, water and food force mayors to address development issues before quality of life issues.
- Mayors of such cities often cannot afford expensive infrastructure solutions of cities like Singapore or Shanghai. They have to seek more innovative, creative and lower cost solutions.
- Yet cities in developing countries can receive significantly more support from national governments and international development agencies, as such cities are recognized as engines of the national economy.



# For more information

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