Eco-City development Indicator system in China

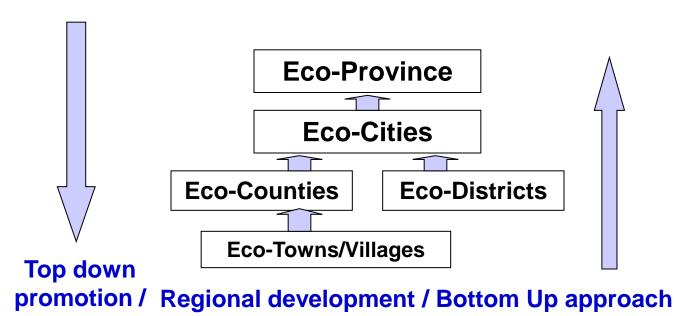
Eco – demonstration program under MoEP

- 1995, Eco-City, Eco-Village, Eco-District Eco-Province
- 1996~2004, SEPA approved 9 batches of cities as "Ecological Development Demonstration pilot areas"
- Indicator system version 1, 2003
- Indicator system version 2, 2008
- To 2008, 6 cities, 3 counties, and 2 districts were officially nominated as "eco-" areas
- 2010-2011 28 more "Ecological Development Demonstration pilot areas"

Eco - demonstration program under MoEP

Objectives:

Based on the principles of sustainable development and ecological economy, to promote regional harmonic development of economy and society with environmental protection, to establish appropriate cyclic system for the development of economy, society and integrated natural system, to ensure adequate utilization of natural resource and improvement of ecological environment, while economic and social development meet the demand by the people.



Application procedure for eco-demonstration

- Step1: Apply to MoEP for an eco demonstration unit
 - after the first screening, 389 out of 528 cities/counties/districts were accepted as pilot/experimenting units
- Step2: Conduct an ecocity plan, an outline
 - Set up ecocity objectives
 - Survey on current situation
 - Comprehensive analysis on existing master plan and sectoral plans
 - Analysis and adjustment
 - Recómmendatións, with proposals for construction projects

Step3: Implement the ecocity plan

- Establishing administrative leading group
- Assign tasks
- Highlight projects (e.g., eco-community, eco-industrial park...)
- All-round promotion, public participation
- Legal actions

Step4: Official nomination

- Monitoring and self-evaluation
- Applying for reviewing from MoEP, from province to MoEP
- Nomination by MoEP as state-level Eco-district/county/city

Step5: Maintenance and management

- Management office
- Coordination timely among governmental departments
- Annual reports





Rongcheng City

Jiangyin City

4 cities: Zhangjiagang, Changshu, Kunshan, and Taicang

under Suzhou

☆ City	★ County	☆ Urban District
Zhangjiagang	Anji (Zhejiang)	Minghang (Shanghai)
Changshu	Miyun (Beijing)	Yantian (Shenzhen)
Kunshan	Yanqing (Beijing)	
Taicang		
Jiangyin		
Rongcheng		

Anji County of Zhejiang

Minghang District of Shanghai

Yantian District of Shenzhen



Provinces for EBD

The 2003 evaluation 28 indices for Eco-City

Per capita GDP

Per capita financial income

Peasants income per person

Urban citizen income per person

Percentage of third industry

Energy consump. per unit GDP

Water consump. per unit GDP

Clean production enterprises rate, ISO14000

Forest coverage

Proportion of protected area

Degraded land rehabilitation rate

Air quality (S,N)

Water quality: urban & coastal

SO2, COD emission

Drinking water
Sewage treatment
Industrial
wastewater reuse

Noise level

Solid waste Disposal Industrial waste reuse rate

Urban green area per capita

Envir. Quality of tourism areas

Urban lifeline system

Urbanization level

Gas utilization rate

Rate of centralized heating

Engel coefficient

Gini coefficient

Higher edu. rate

Envir. Edu. rate

Public satisfaction rate to environment



The 2008 evaluation 19 indices for Eco-City

Rural per capita income

Forest coverage

Drinking water quality

Urbanization level

Percentage share of third industry

Proportion of protected area

Ratio of urban sewage treatment

Coverage of centralized heatsupply

Energy consumption per unit GDP

Air quality

Noise level

Public satisfaction rate to environment

Corporation qualified in CPA

Water quality

Disposal rate of Solid waste

Fresh water consumption per capita IAV

COD & SO₂ emission intensity

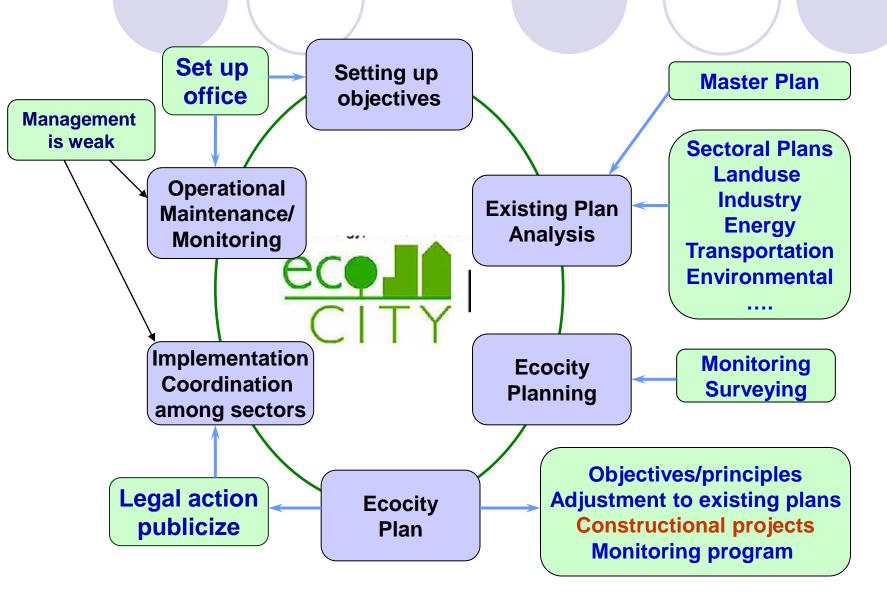
Urban green area per capita

Investment ratio for environment

CPA: cleaner production audit IAV: industrial added value

Economic indices
Env & Resc. indices
Social indices

Ecocity planning procedure



Eco-city management

- Approve the eco-plan and go through a legal procedure
- Establish an office to coordinate various sectors, functions:
 - Under the municipal government or local EPB
 - Edit and publish eco-development news bulletins
 - Coordinate monitoring and feedbacks
 - Timely meetings
 - Report progresses to the municipal government and to the public
- Implement policies/measures/projects by corresponding departments, e.g. "cell projects"
- Annual assessment and report to MoEP
- Problems:
 - Local EPB or the coordinating office does not have the authority...
 - Often lack of long-term functioning of the office
 - If other activities seem more important ...

