



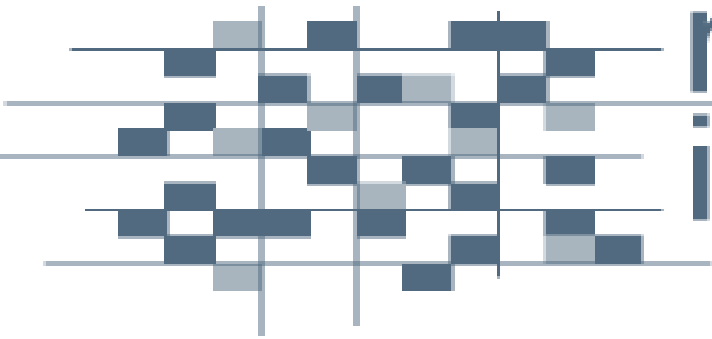
# Reflections from the Frontlines of Sustainability

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metropolitan  
institute at  
virginia tech

[www.mi.vt.edu](http://www.mi.vt.edu)

## Mission

Policy and applied research on the key forces shaping metropolitan growth and development

## Major Initiatives

- The New Metropolis
- Fair Growth
- **Green Regions**
- Smart Governance
- World Cities



Eco-CITY  ALEXANDRIA


# Pioneers of Sustainability





# Sustainability Planning & Policy Frameworks

- USCM Climate Change & Cool Cities
- ICLEI's Agenda 21 & Climate Communities
- Eco Municipality Movement
- Eco City's International & Eco City Builders
- APA's Sustainability Planning Guide
- CNU's Low Carbon Neighborhoods
- LEED-ND
- ASLA's Sustainable Sites Initiative
- Community Energy Planning

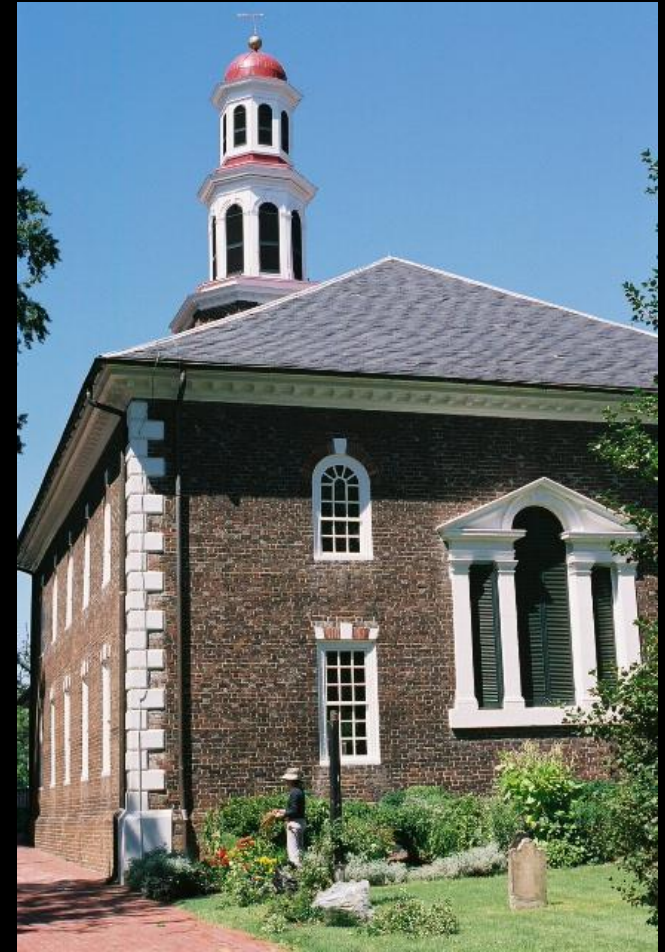


*Like acrobats without a net, planners are working the frontline of sustainability and livability practice without the benefit of a profession wide consensus on standards and methods. These are indeed exciting times.*

*Professor David R. Godschalk, UNC  
JAPA, Winter 2004*

# City of Alexandria

- Incorporated 1779
- Evolved into a suburb of Washington, DC with 140,000 residents
- 55% hold BAs and 25% hold graduate degrees
- 25% foreign born





# The Eco City Players

<http://alexandriava.gov/tes/eco-city/default.aspx>

- Mayor and City Council
- Citizen-driven *Environmental Policy Commission*
- Office of Environmental Quality—Lead City Agency
- Environmental Coordinating Group



# Virginia Tech's Eco-City Studio

## <http://ecocity.ncr.vt.edu>

- 3 Professors and 40 Students
- Inventory City Programs
- Compendium Model Practices
- Sustainability Reports
- EPC/ECG Activities
  - Work sessions
  - Drafting retreats
- Community outreach Activities
  - Facilitated public meetings
  - Implemented outreach strategies
  - Created Eco City Web Site and Blog

# Eco-City Charter

# Environmental Action Plan

**Community Outreach**

**Survey**

**Café**

**Summit**

**Adoption**

June 2008

**Meetings**  
(EPC & Staff)

**Inventory**

(Existing Programs & Policies)

**Compendium**

(Model Practices)

**Work Session**

(City Staff & EPC)

**Adoption**

Summer 2009



## ECO-CITY ALEXANDRIA

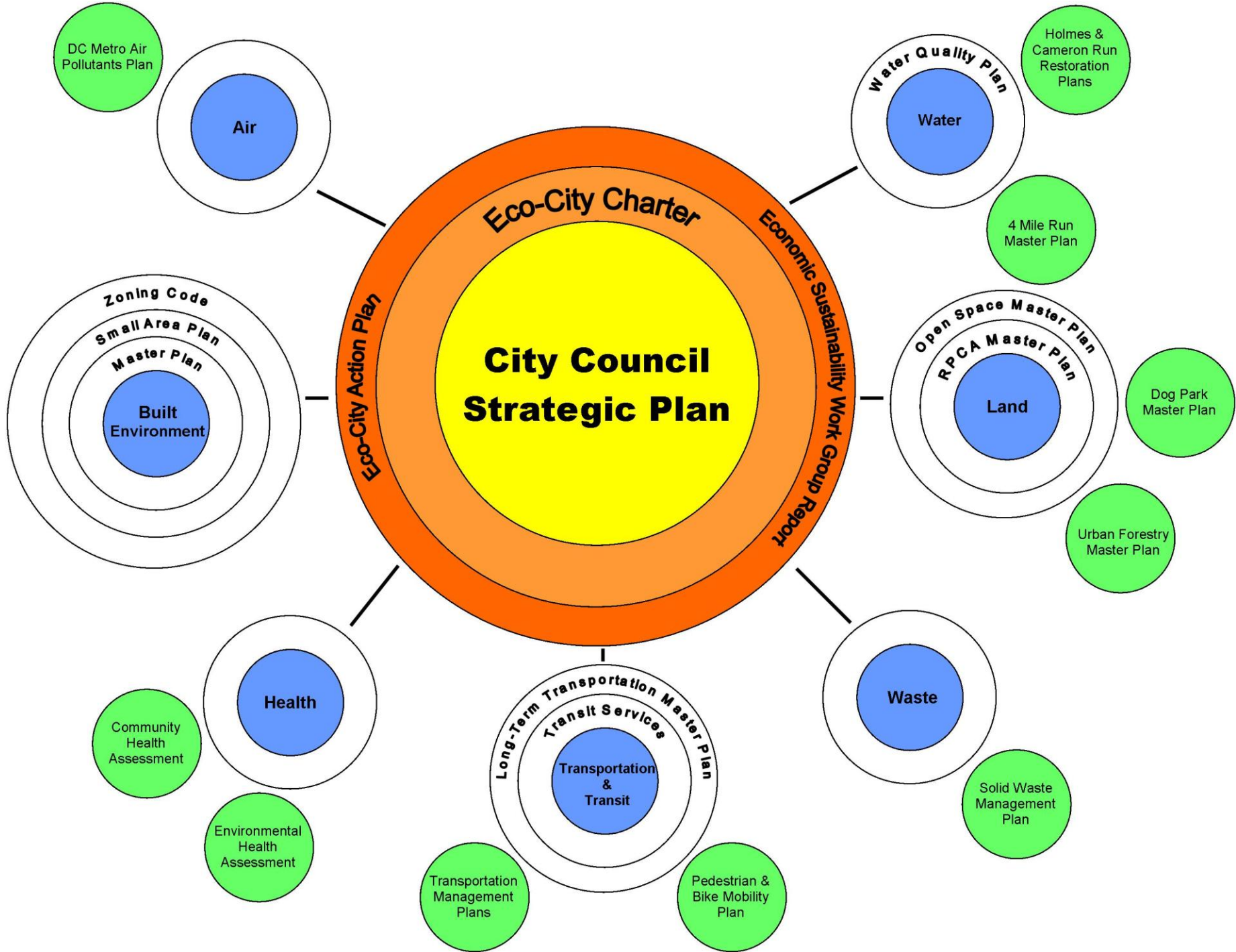
A Green-Ventory of City Environmental  
Policies, Plans, and Programs



# LESSON ONE

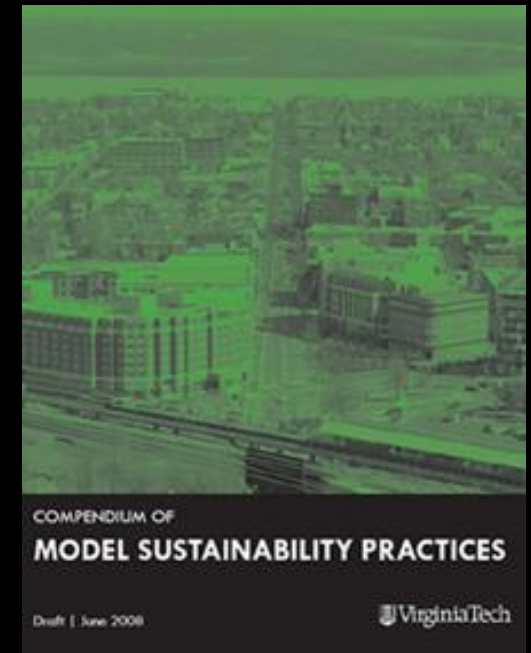
# Inventory what you are already doing





# LESSON TWO: Identify What Other Cities are Doing

- *Compendium of Model Practices*
- Focus on comparable communities
  - size, population, mid-Atlantic, etc.
  - Dillon's Rule in Virginia
- Select interviews w/ program staff
- Compiled more than 250 model practices
- **Working document for EPC & staff discussions**





# Cross Cutting Themes

- Duality of climate change—Carbon emissions and planning for adaptation
- Green buildings and community energy
- Land use linkages with transport and environmental health
- Economic & business sustainability
- Smart growth & green design
- Civic sustainability
- Metropolitan sustainability



# LESSON THREE: Create your own brand of sustainability

- What is an Eco City?
- What is Sustainability?



**ECO-CITY**  
**SUMMIT**



**ECO-CITY**  **ALEXANDRIA**  
environment economy community

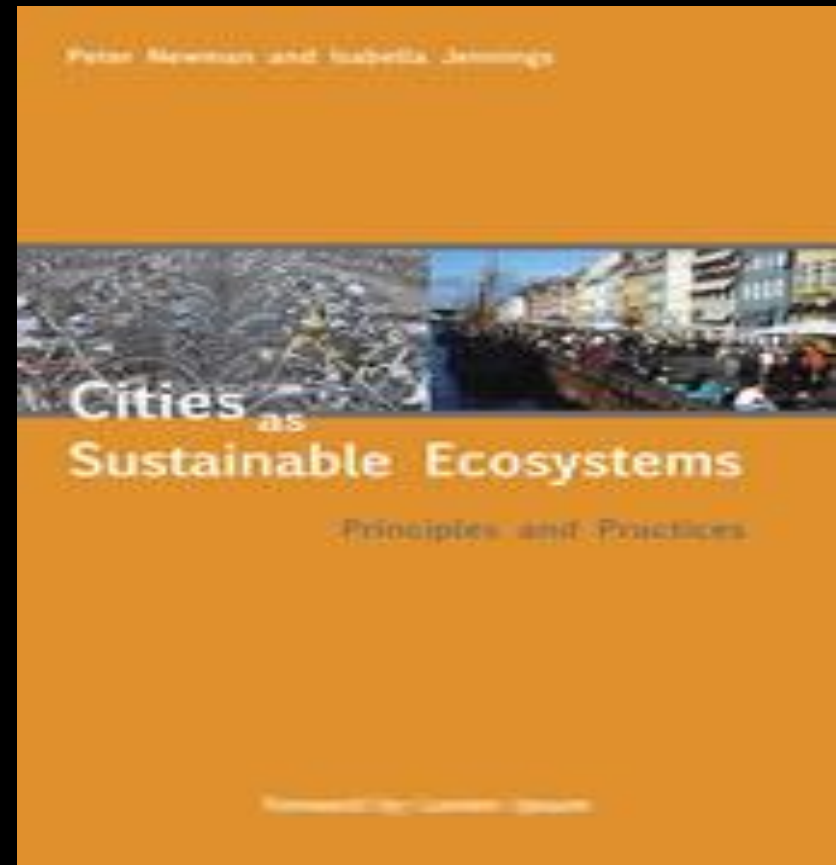


**ECO-CITY**  **ALEXANDRIA**



# What is an Eco-City?

“Cities are viewed as eco-systems in themselves, with materials, energy flows, and complex information systems like any other ecosystem.”



# What is Eco-Sustainability?

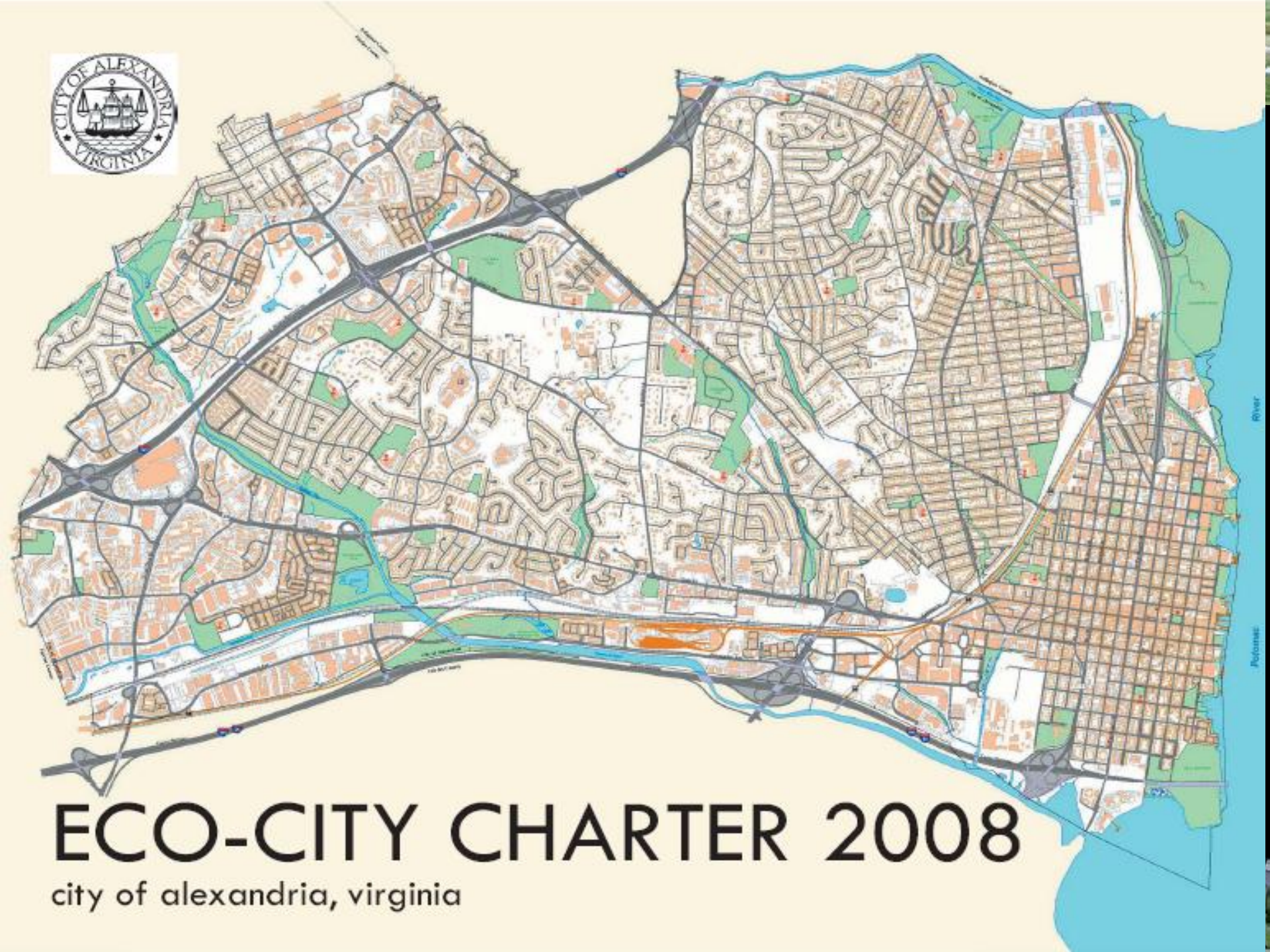
- *Cities as Sustainable Ecosystems*
  - Peter Newman and Isabella Jennings
- *Resilient Cities—Responding to Peak Oil and Climate Change*
  - Peter Newman and Timothy Beatley
- *Taking Sustainable Cities Seriously*
  - Kent E. Portney
- *Cradle to Cradle*
  - William McDonough & M. Braungart
- *Eco Cities*
  - Richard Register





## **LESSON FOUR—Develop a Holistic Vision of Sustainability**

- Survey of 15 sustainability charters and policy plans and programs
- Core components:
  - Preamble or vision statement
  - Principles and goals
  - Roles and responsibilities
  - Performance measurements & indicators
- Format—photos, signatories, etc.



# ECO-CITY CHARTER 2008

city of alexandria, virginia

# Charter's Sustainability Vision

*We envision Alexandria as a city that:*

- Builds wisely
- Embraces natural beauty
- Clears the air
- Improves water quality
- Moves smartly
- Conserves energy and resources
- Minimizes waste
- Supports healthy living
- Readies for change
- Leads intelligently and holistically
- Shares responsibility



# 10 Charter Principles

- Solid Waste
- Water Resources
- Air Quality
- Land Use and Open Space
- Transportation
- Energy
- Building Green
- Environmental Health
- Emerging Threats/Climate Change
- Implementation



# LESSON FIVE: Be prepared to meet and meet and ....

- EPC meetings twice a month
- EPC—city staff work sessions
- EPC drafting retreats
- Shuttle facilitation and consensus building approaches
  - With EPC members
  - Among city departments
  - With elected officials



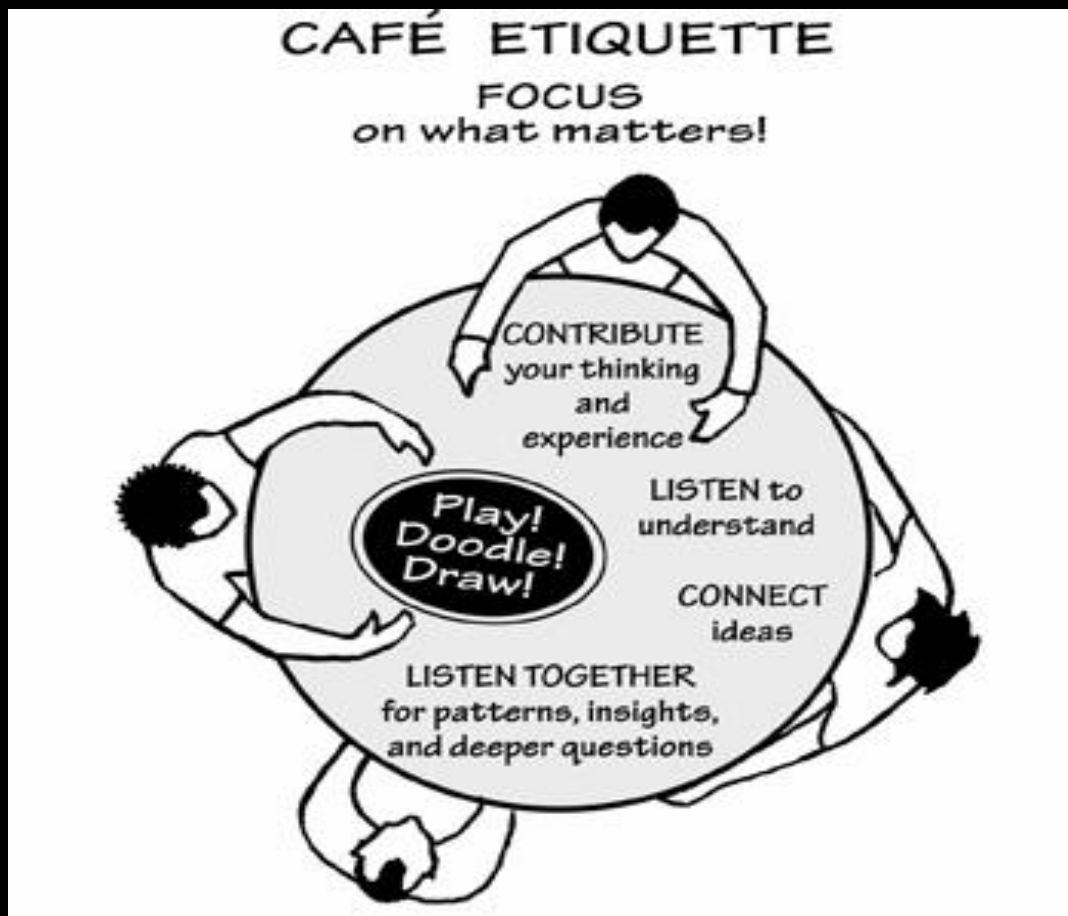
## **LESSON SIX: Engage the community and promote the Eco City message**

- Eco-City Cafés – March 2008 and 2009
- Presentations to Civic Associations
- Eco City Open Houses – November 2008 and May 2009
- Eco-City Summit – May 2008

# World Café Model = Eco-City Cafe



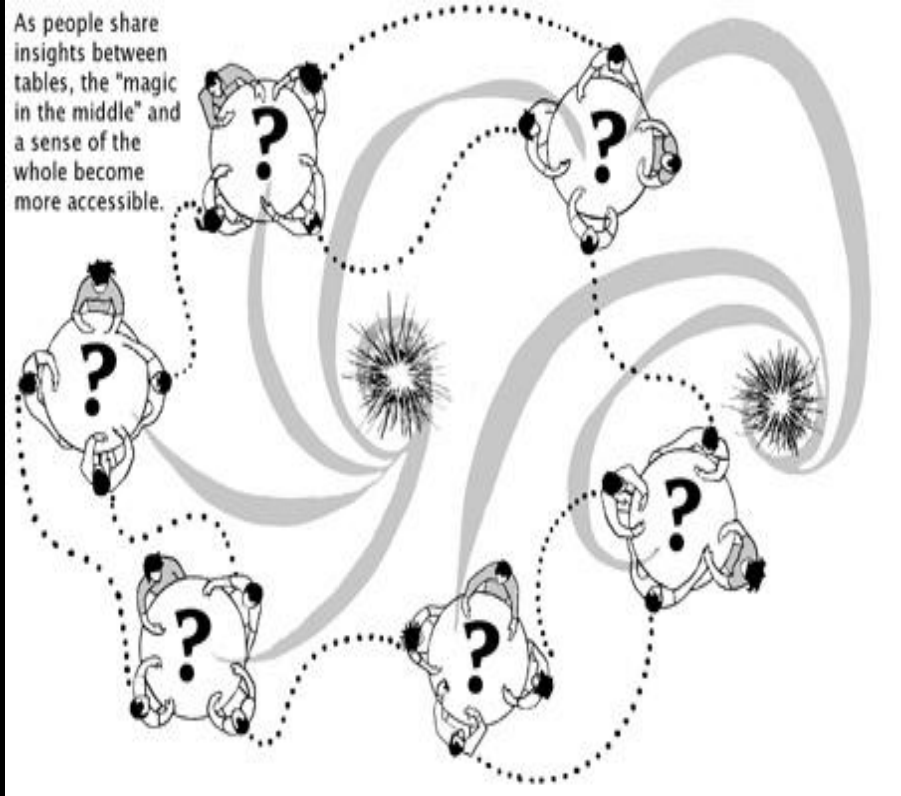
# Eco-City Café



# The Process: How it Works



As people share insights between tables, the "magic in the middle" and a sense of the whole become more accessible.





# Eco-City Summit 2008

- Mayor Bob Harvey from Waitakere, New Zealand, keynote speaker.
- Local elected officials, businesses, and citizens offered strategies for the **City's sustainable future.**
- Using keypad voting technology, participants could state their policy preferences and results displayed instantly.

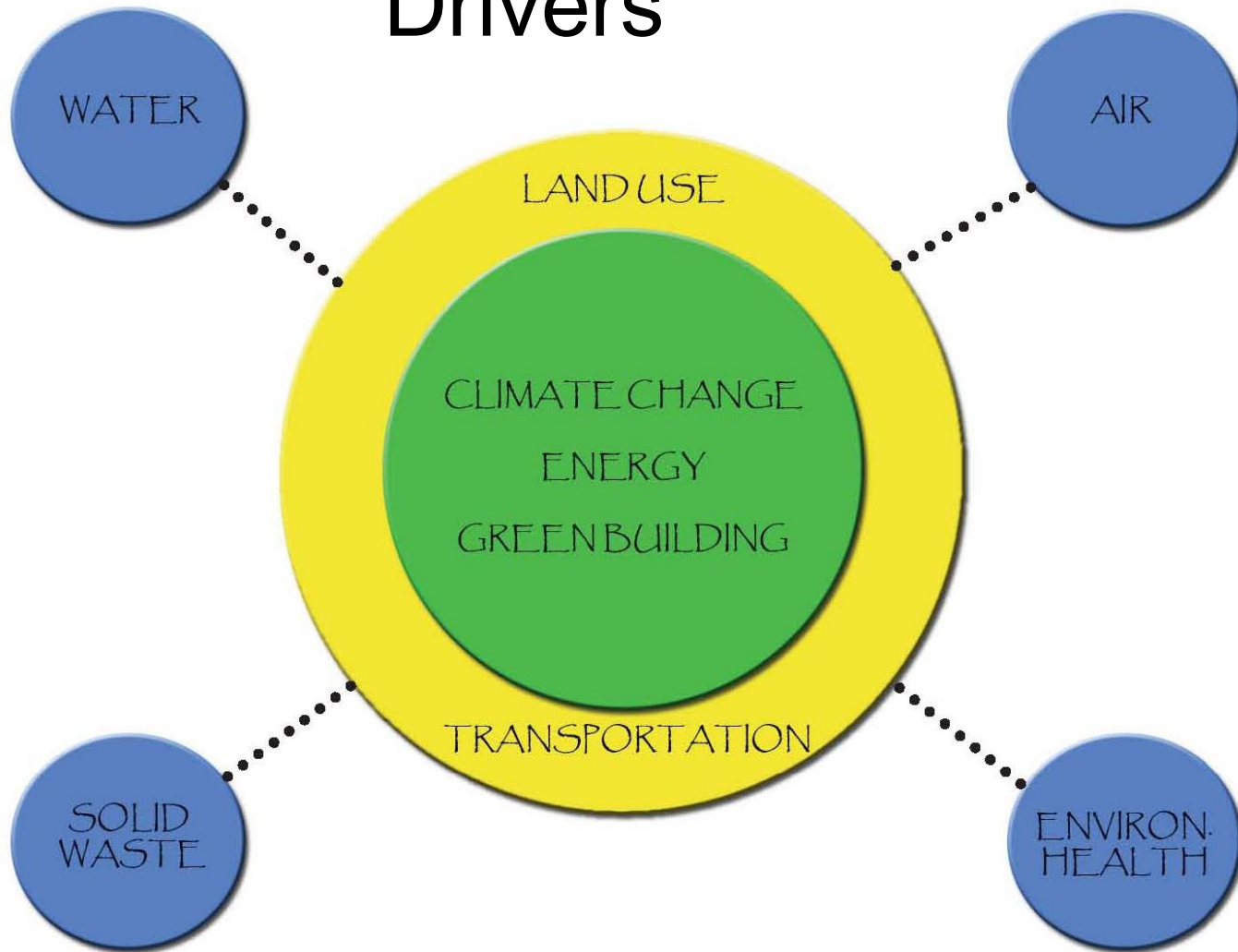




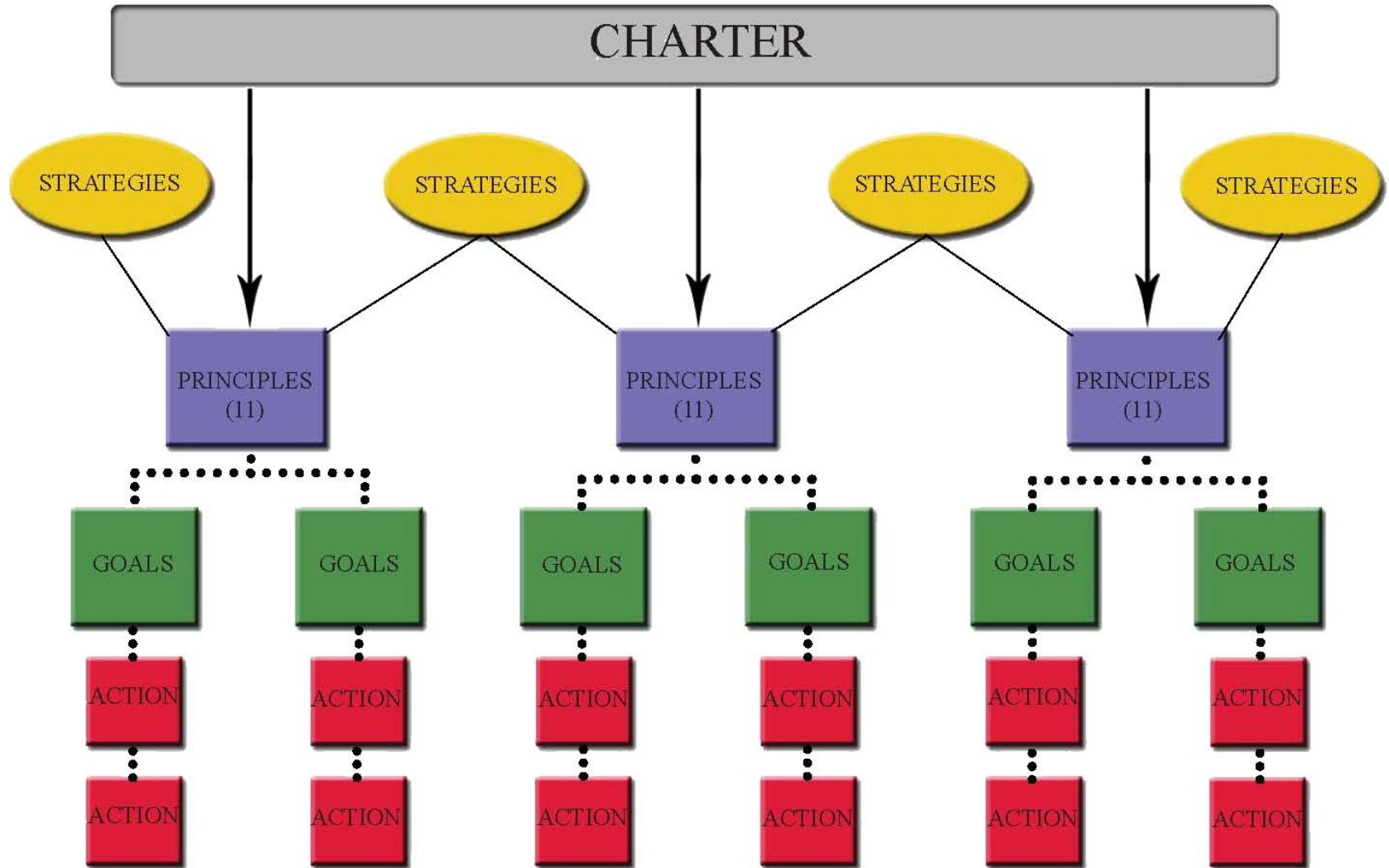
# LESSON SEVEN: Devise a Plan of Action

- Alexandria's Environmental Action Plan 2030
- Futuristic Assumptions and Trends
  - New regulatory frameworks & revenue sources
  - New green business models
  - Local government restructuring
  - Stronger regional planning

# 2030 Sustainability Policy Drivers



# Environmental Action Plan 2009





# Aspirational Targets

- Achieve MWCOG greenhouse gas emission reduction targets
- 10% reduction in emissions by 2012
- 20% reduction below 2005 level by 2020
- 80% reduction below 2005 level by 2050
- By 2030, all new buildings will be carbon neutral
- By 2030, create three high capacity transit corridors
- Eliminate the harmful impact of Combined Sewer System By 2025
- By 2020, achieve 40% tree canopy coverage
- By 2020, increase the recycling rate to 50%
- By 2030, reduce the incidence of asthma by 50%



# LESSON EIGHT: Sustainability Sectors & Implementation

- Financing sustainability
- Business sustainability
- Civic sustainability
- City as Leader
- EPC as Eco City Guardian
- Regional Partnerships



# Alexandria's Challenges on the Horizon

- Infuse *Eco City* through all city operations
- Expand community engagement
- Reconcile start-up costs with current fiscal and economic crisis
- Build capacity of regional/local NGOs
- Link *Eco City Alexandria* with the region



# Federal and State Roles in Sustainability Planning

- Provide TA and planning resources
- Create University-based Sustainable Communities TA Centers
- Implement a Place Based Strategy for declining cities and counties
- Impose Principles of Planning Integration
- Merge Current Legislative Opportunities
  - **Dodd's Livable Communities Act (S 16)**
  - Ryan/Higgins Community Regeneration Act (HR 932)

# Contact Information

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