Bringing Global Thinking to Local Sustainability Efforts: A Collaborative Project for the Boston Region

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U.S. EPA Collaborative Science and Technology Network for Sustainability Progress Review Workshop

October 18, 2005
Overview of Presentation

1. Project Background
2. Scope of Work
3. Intended outcomes
1. Project Background

- Increasing global economic, social and environmental interconnectedness
- Uneven distribution of impacts and benefits
- Emergence of urgent large-scale problems: climate change, loss of biodiversity, decline of freshwater resources
- Clear need for preventative approaches and for linking local and global efforts
an integrated view...
Local and Global Links

• Since Earth Summit 1992, thousands of local initiatives begun (ICLEI and Agenda 21)
• Many local successes, but few/weak linkages to global issues
• Sustainable communities in an unsustainable world?
• How to strengthen local-global connectivity
• “Think locally, act globally”
Project Collaborators

• Tellus Institute
• Metropolitan Area Planning Council (MAPC)
• The Boston Foundation Indicators Project
• MA State Sustainability Program

• Plus project Working Group of outside stakeholders
2. Scope of Work

- Review and coordinate with MetroFuture process
- Stakeholder consultation
- Data collection, review and synthesis
- Enhance PoleStar scenario building tool
- Develop scenarios: BAU, Policy Reform, Deep Change
- Identify policy and other implementation opportunities
MetroFuture Planning Process

- Coordinated by MAPC, regional planning agency for 101 communities in Boston region (~3 mil pop)

- 3-phase process:
  - Stakeholder visioning (complete)
  - Data analysis and scenario development (ongoing)
  - Implementation strategies (next)

- Tellus coordinating closely with MAPC
  - Serve on MetroFuture technical advisory group
  - MAPC participates in our project working group
Stakeholder Consultation

- Build on input to MetroFuture process
  - Analyzed 3,000 visioning statements for elements of sustainability
- Established 25 person Stakeholders Group
- Held Stakeholders meeting in June
- Developed project website and e-discussion group: www.bostonscenarios.org
Data Collection, Review & Synthesis

• Gather recent and current data (iterative)
  - demographics
  - economic activity
  - industry
  - transportation
  - air quality
  - energy production/use
  - health
  - employment and income
  - income
  - land use
  - water quantity and quality
  - solid waste
  - food and agriculture

• Rely on existing sources (MAPC, Indicators Project, state)

• Refine as appropriate as better data becomes available
POLESTAR
A Tool for Sustainability Studies

• Decision support system for sustainability studies, local to global
• Developed by Tellus in early 1990s
• Not a rigid model, but an open framework to build integrated scenarios plus a database
• Allows user to identify driving forces, address critical uncertainties and explore alternative futures
• Current enhancements include: improved user interface, inclusion of high-level levers, better graphics
The PoleStar System
A Framework for Sustainability Assessment

Society
- Pop, GDP, Income
  - Households
  - Transport
  - Services
  - Industry
  - Agriculture
  - Energy Conv
  - Forestry

Pressures
- Resources
  - Energy
  - Water
  - Land
  - Minerals
- Pollution
  - Air
  - Water
  - Toxics
  - Solid Waste

Sustainability Evaluation
- Major Indicators
- Report Card
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Develop Scenarios for Boston Region

- Iterative process with collaborators and stakeholders: first order scenarios complete and under review
- Three scenarios being developed:
  - **Business-As-Usual (BAU):** little change in production and consumption patterns; equity not addressed
  - **Policy Reform:** technological and policy measures emphasized to moderate ecological destruction and social inequality
  - **Deep Change:** changes in values lead to changes in lifestyles and institutions (along with technological innovations) to achieve sustainability with global responsibility
Implementation Opportunities

• MetroFuture process
• MA State Sustainability Program
• MPO Regional Transportation Plan
• MA Climate Action Plan
• Boston Indicators Project
• Other NGO initiatives
3. Intended Outcomes

• Long-term goal is to support regional planning for sustainability by providing tools and methods that promotes preventative planning in an integrated systems framework

• Short term goals include:
  – Apply the integrated systems approach in the Boston context using PoleStar to examine alternative scenarios
  – Support planning & inform policy-making at local, regional and state levels to achieve a sustainable future for the region consistent with global responsibility
  – Promote networking of various planning efforts in the Boston region – from local to regional, state and federal