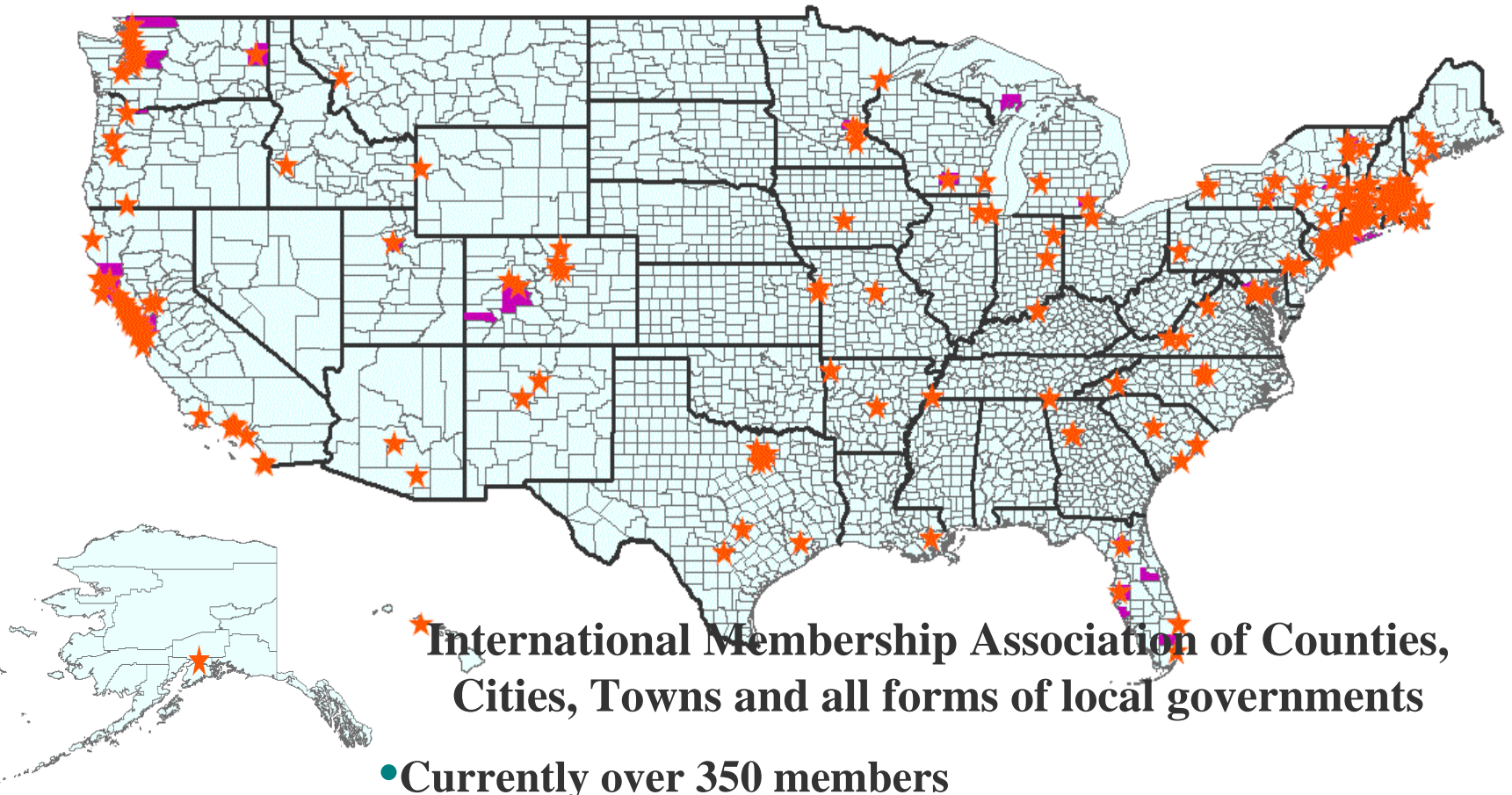

Smart Energy Planning: Municipal Climate Protection and Energy Planning

Kim Lundgren, Director
Northeast Regional Capacity Center
ICLEI- Local Governments for Sustainability

***National Association of Regional Councils
6th Annual Metropolitan Regions Forum
Worcester, MA
December 7, 2007***

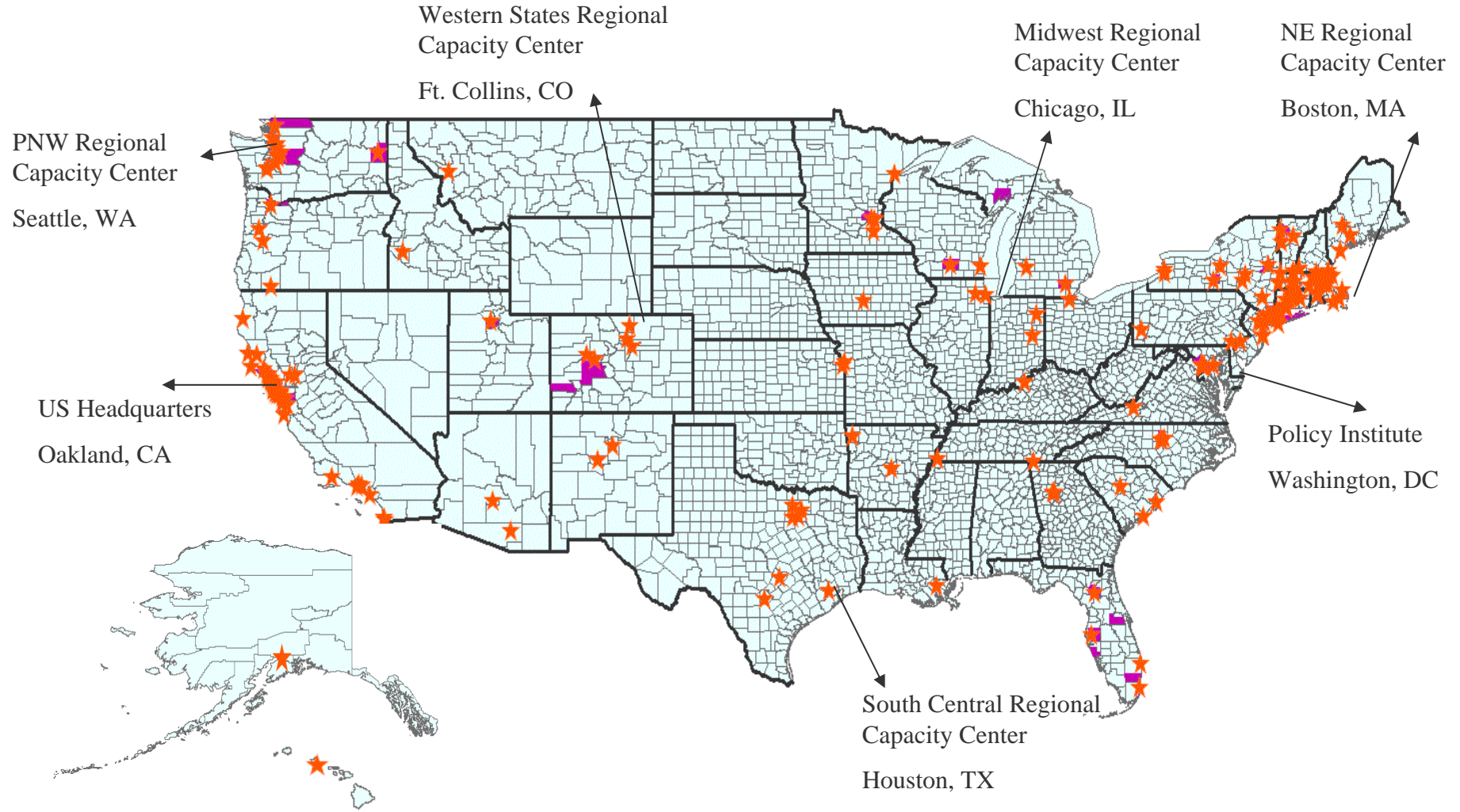
The ICLEI Network



International Membership Association of Counties, Cities, Towns and all forms of local governments

- **Currently over 350 members**
- **Over 40% growth in last year**
- **Representing 25% of total US population**

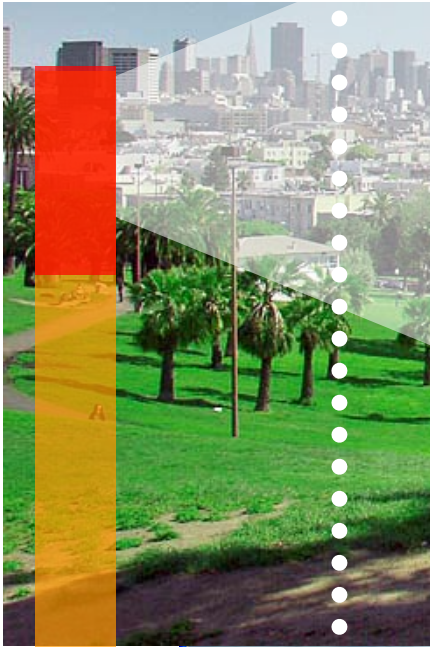
ICLEI USA Offices



The ICLEI 5-Milestone Process



Milestones 1-3: Baseline; Target; Action Plan



65%
Buildings

Milestone 1: Baseline

Milestone 2: 20% 1

Milestone 3: Devel

Municipal Building Emissions Reductions

Installation of High Efficiency Equipment

- Require higher efficiency HVAC, boilers, lighting and window technologies
- Implement in 2009
- Anticipated annual savings: 6.5 million kWh
45,000 therms
2,791 tons CO₂e
\$1,040,485

Purchase of Energy STAR appliances

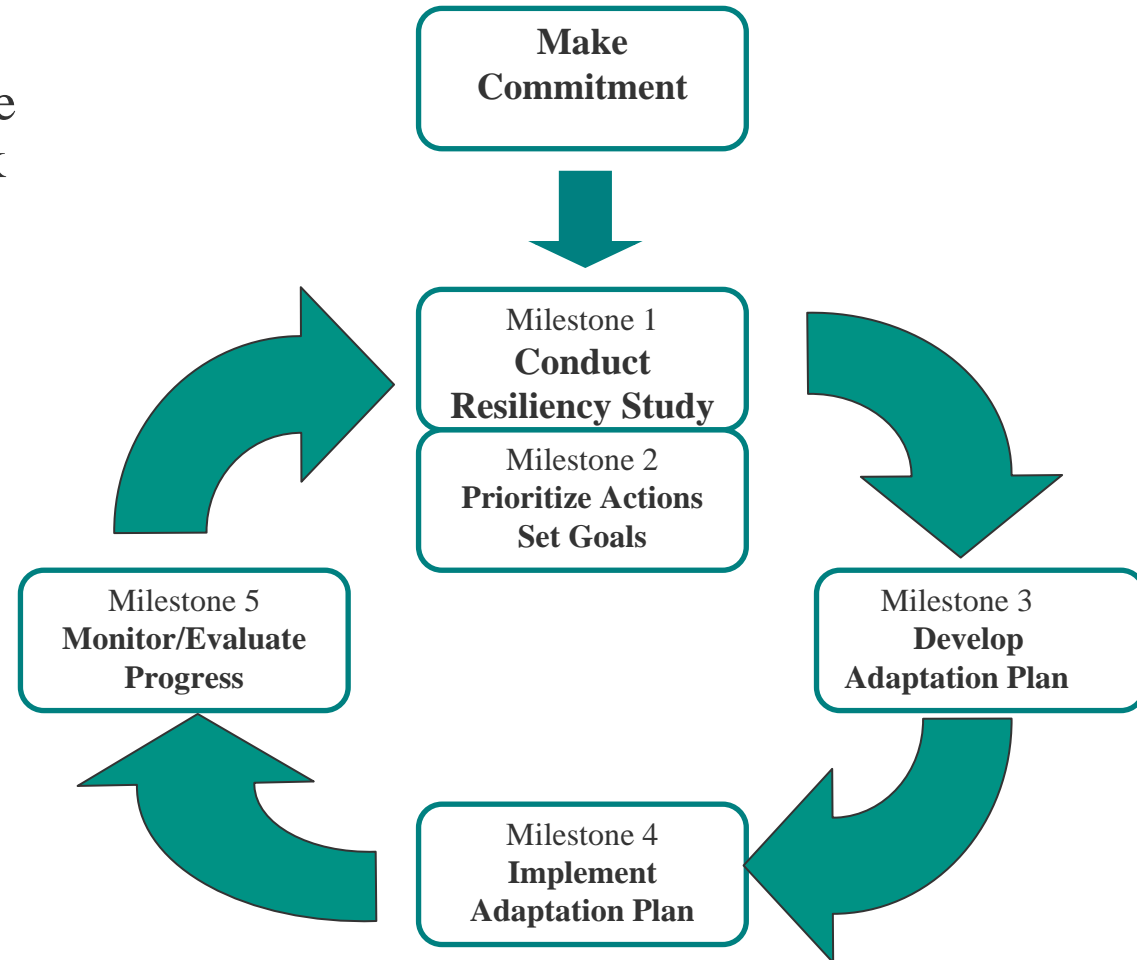
- Replace existing equipment with Energy STAR copiers, printers, and computers throughout City Hall
- Implement in 2008
- Anticipated annual savings: 1.3 million kWh
7,000 therms
546 tons CO₂e
\$707,558

Install Solar Photovoltaic Panels

- Install photovoltaic panels on all municipal facilities where feasible
- Implement in 2007
- Anticipated annual savings: 140,000 kWh
103 tons CO₂e
\$14,000

ICLEI's Adaptation Campaign

- Recognition of need for climate adaptation and mitigation work
- Link LGs to available climate change science
- Identify opportunities for increasing resiliency
- Sustainable Approach
 - Built Environment
 - Natural Environment
 - Social Environment
- Additionally, King County Adaptation Guidebook





ICLEI Tools

What Does ICLEI Provide its Members?

- Standard Methodology
- Technical Assistance
- Emissions Analysis Software
- Assistance Completing Inventory
- Assistance in Developing Climate Action Plan
- Tools and Resources (publications)
- Policy and Ordinance Templates
- Training Sessions
- Invitation to regional and national events
- Access to global network of local government climate leaders
- Competitive Grants
- Media and Recognition



ICLEI Tools

**Emissions
Analysis
Calculator
Tools**

Clean Air and Climate Protection Software©



File Settings Help

Community Analysis

Community Measures

Government Analysis

Government Measures

STAPPA/ALAPCO and ICLEI's

Clean Air and Climate Protection Software

State and Territorial Air Pollution Program Administrators and
Association of Local Air Pollution Control Officials

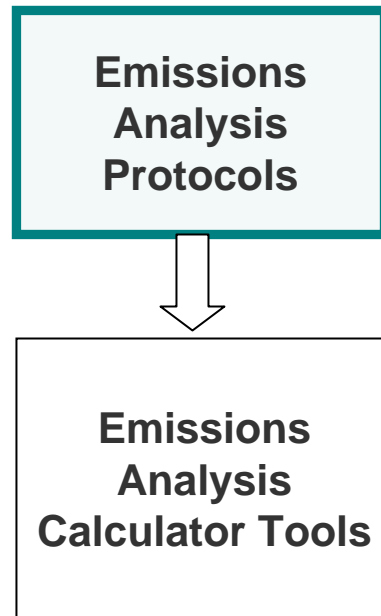
International Council for Local Environmental Initiatives

Released May 2003

On the Horizon: New Emissions Analysis Software

- Currently developing an upgraded, web-based emissions analysis software tool
 - Partnership with Clinton Foundation, Microsoft, Infosys, CNT
 - Free software tool
 - Development underway
 - Enhanced data management, analysis and reporting; integration with other tools
-

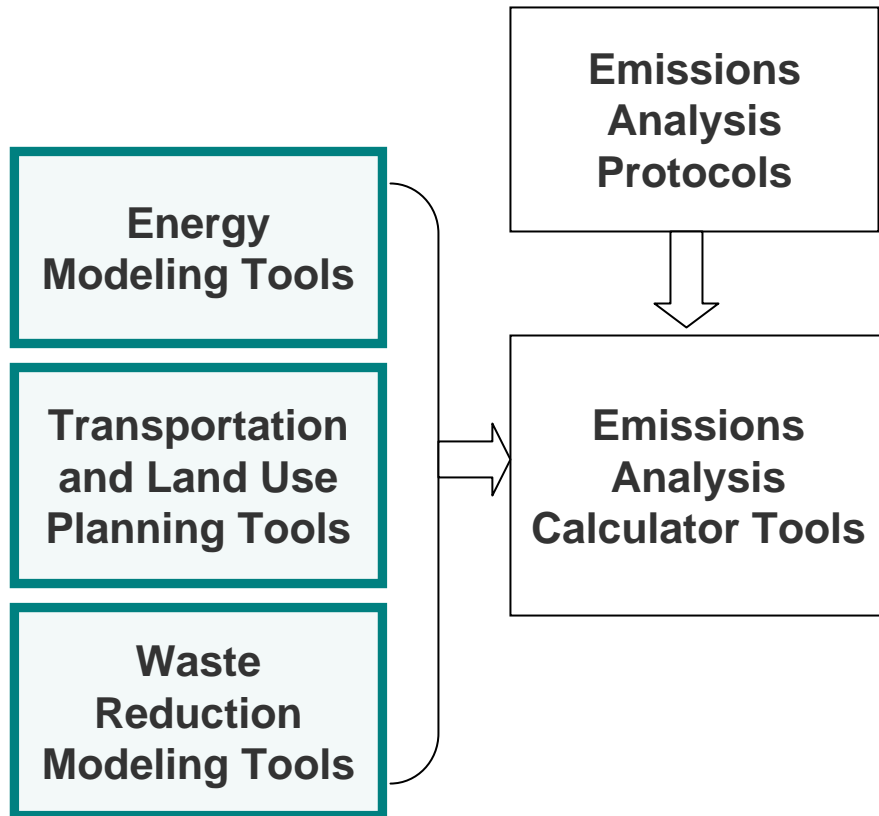
ICLEI Tools



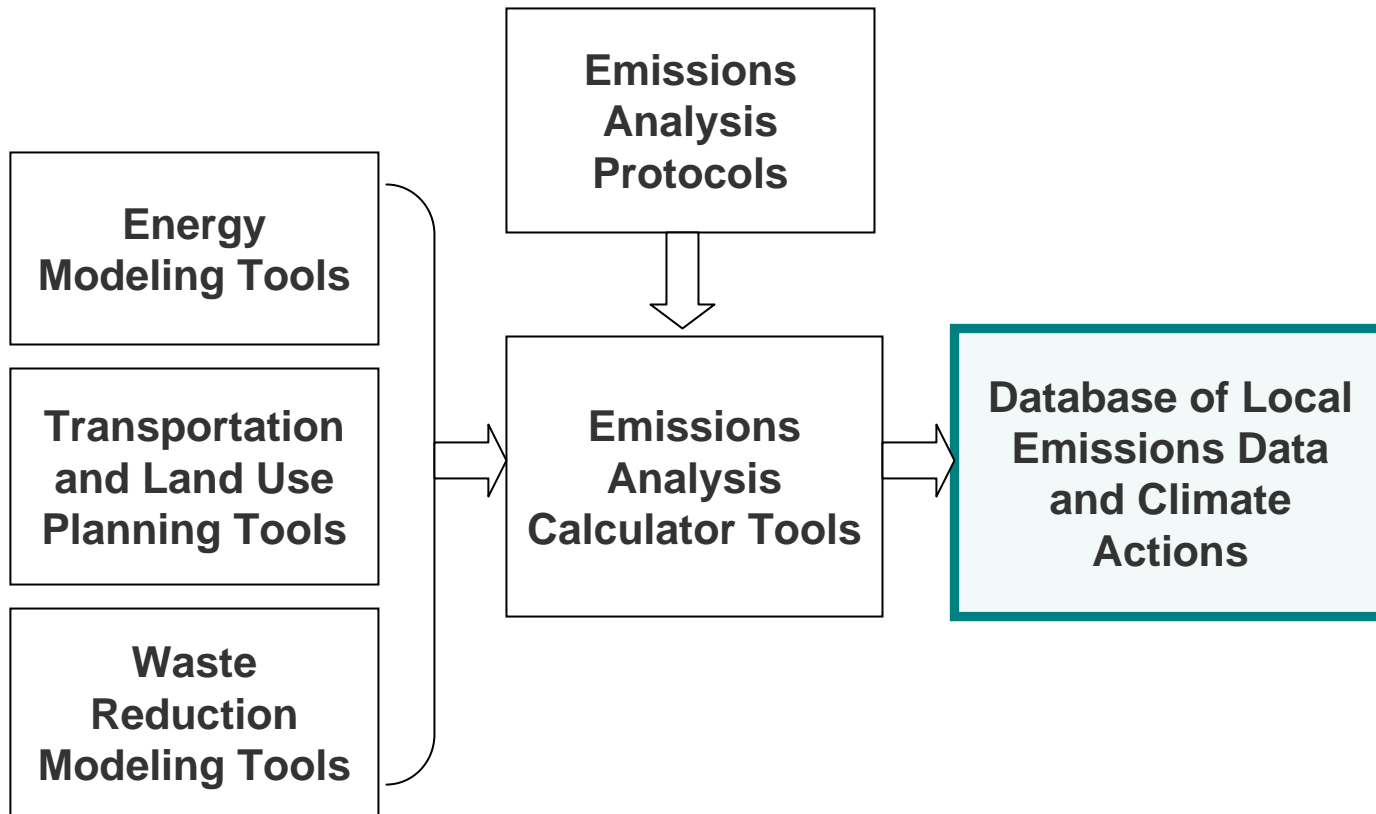
Emissions Analysis Protocol

- Standard methodology
 - Developing with key partners
 - Community-scale analysis
 - Government operations analysis
 - Base vs. additional components
 - Currently in review
-

ICLEI Tools



ICLEI Tools



The ICLEI Database

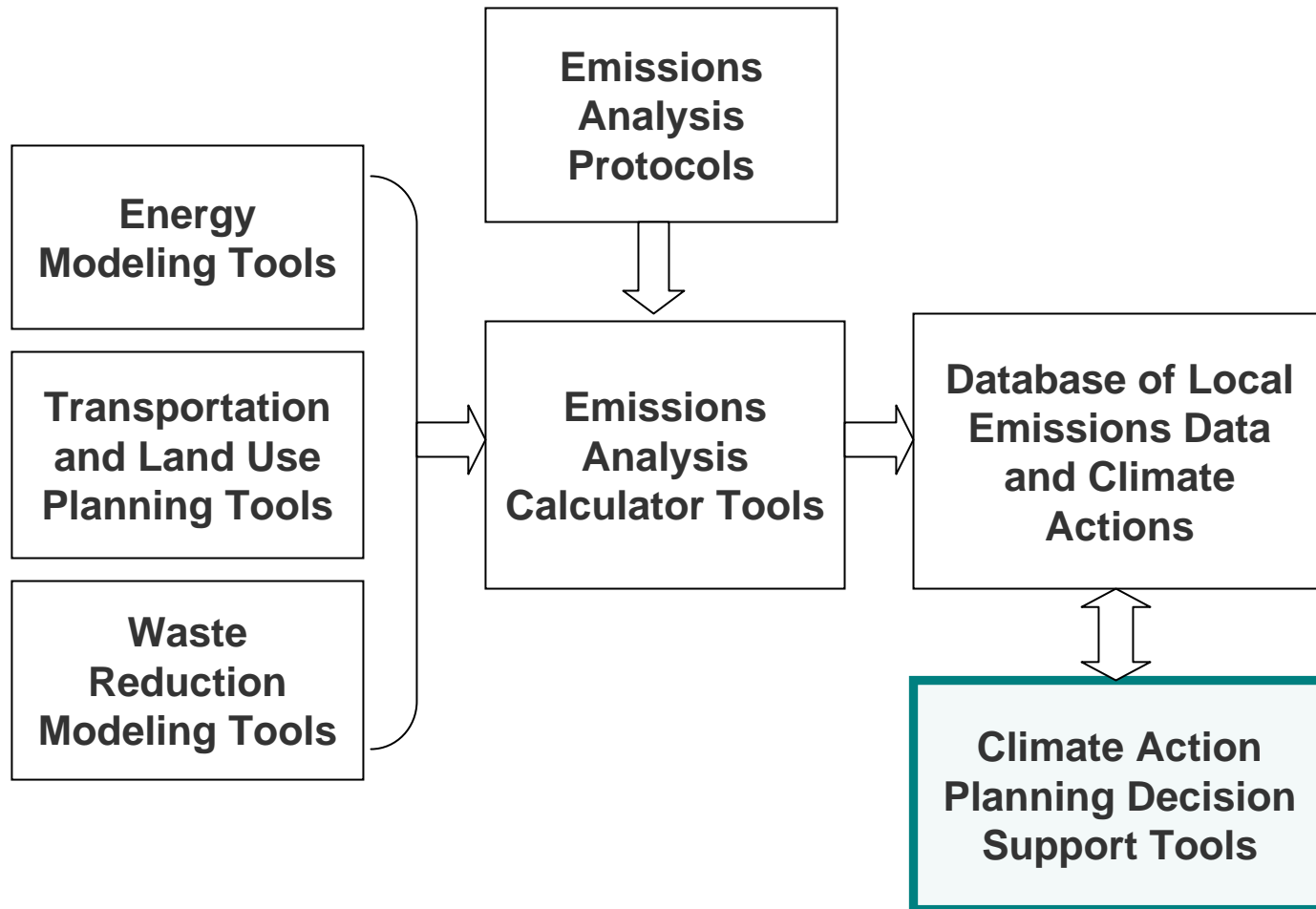
- 1,500 reported climate protection measures
- Projects and policies
- Quantified results
- Secure data

The screenshot displays the 'Community Profile' for Ann Arbor, MI, within the 'Communities and Contacts (iclei_fm_server)' application. The interface includes a left-hand navigation pane with options like 'Browse', 'Layout', and 'Record'. The main content area shows the following details:

- Profile:** Jurisdiction: Ann Arbor, State: MI, County: [blank].
- ICLEI Campaign Participation:** CCP, Climate Safe Communities, Communities21, Water, EcoBudget/TBL.
- ICLEI Member?:** Active Member, Dormant Member, Undecided Participant, Former Member, Non-Member.
- Primary Liaisons:** John Hietjje (primary elected (US)), Dave Konkle (primary staff (US)).
- Key Stats:** Population: 114024, Application Date: 2007, CCP Resolution Date: 10/20/1997, Record Last Modified: 7/18/2007.
- CCP Milestones Completed:** [blank]
- Emissions Reduced (tons eCO2):** 69989
- ICLEI Staff Lead:** Ayryn

Navigation tabs at the bottom include Home, Contacts, Interactions, Membership, Events & Initiatives, CCP Progress, Measures, Recognition, Software, and Background. A 'Community Profile Notes' section is visible at the bottom of the main content area.

ICLEI Tools



Case Studies

Orange County, FL has installed vending miser sensors on soda vending machines, reducing energy use by turning off everything but cooling compressor when there is no activity in the area (motion sensor activated).

For More Information, see: www.orangecountyfl.net
Louisville Metro installed vending machine controllers in municipal buildings.

For More information, see: <http://www.louisvilleky.gov>
Sonoma County, CA installed vending miser sensors in municipal buildings.

For More Information, see:
www.climateprotectioncampaign.org

Other Resources

ENERGY STAR Vending Machines:
www.energystar.gov/index.cfm?c=vending_machines.pr_vending_machines

Environmentally Preferable Purchasing Program and Database:
www.epa.gov/oppt/epp

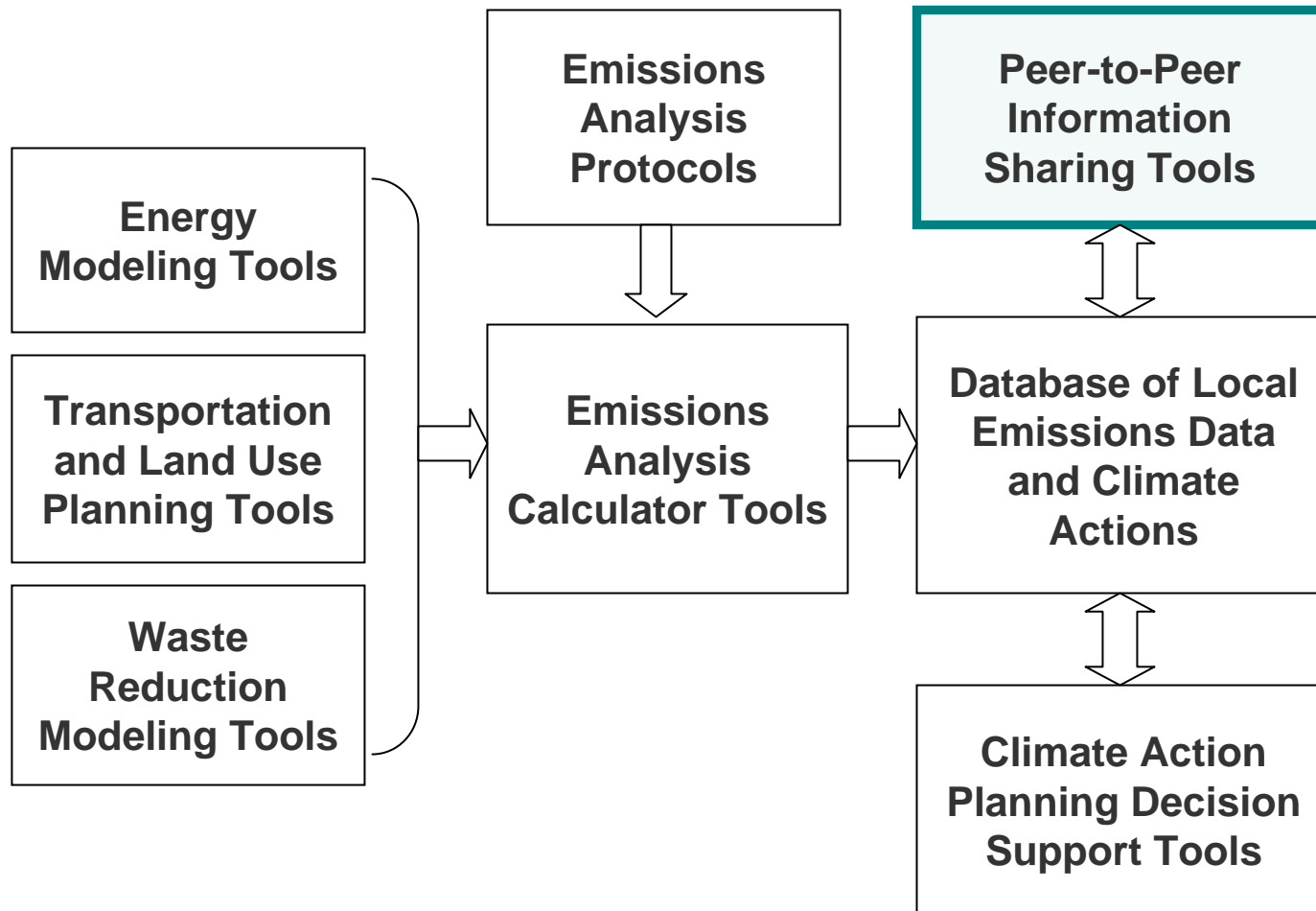
Average Cost Savings:

Assuming the cost of electricity to be 0.0912 \$/kWh (commercial), replacing one vending machine with an ENERGY STAR-rated one save \$151 per year.

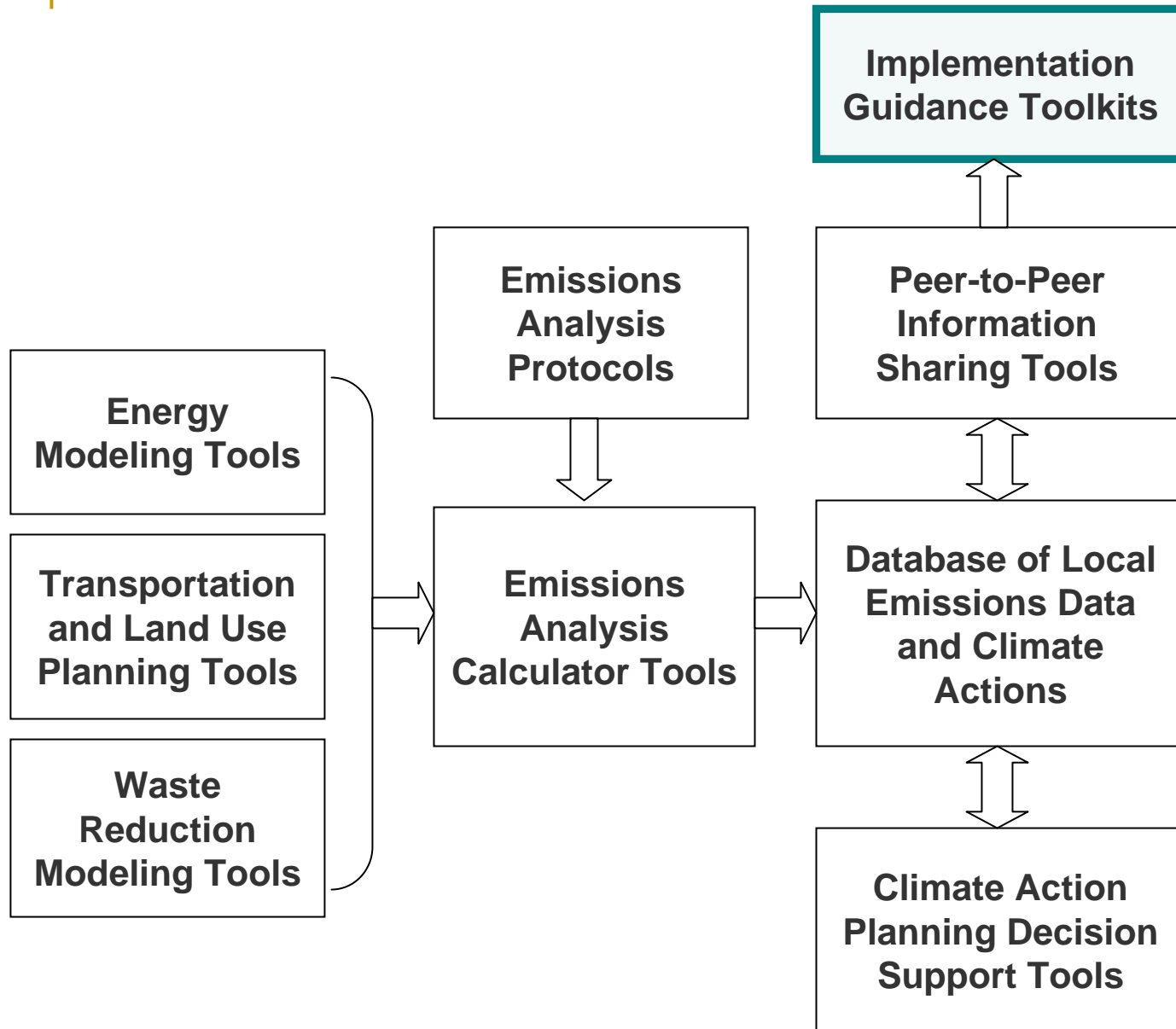
Related Measures

- [ENERGY STAR Monitors](#)
- [ENERGY STAR Copiers](#)
- [Lighting Retrofits](#)
- [Environmentally](#)
- [Preferable Purchasing Policy](#)

ICLEI Tools

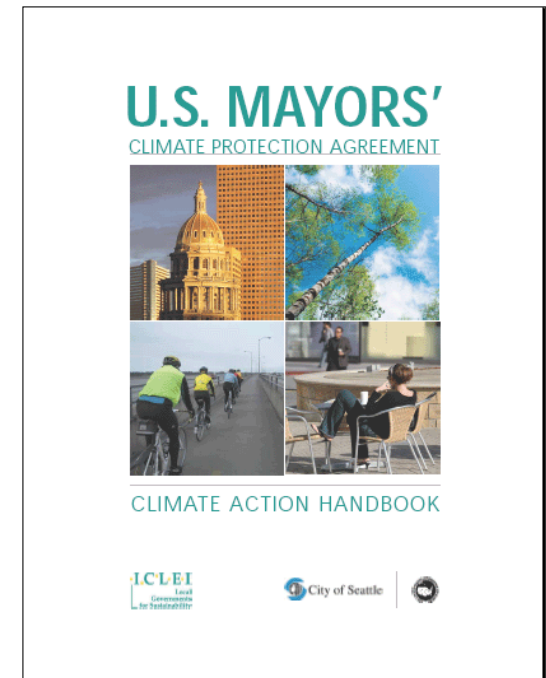


ICLEI Tools

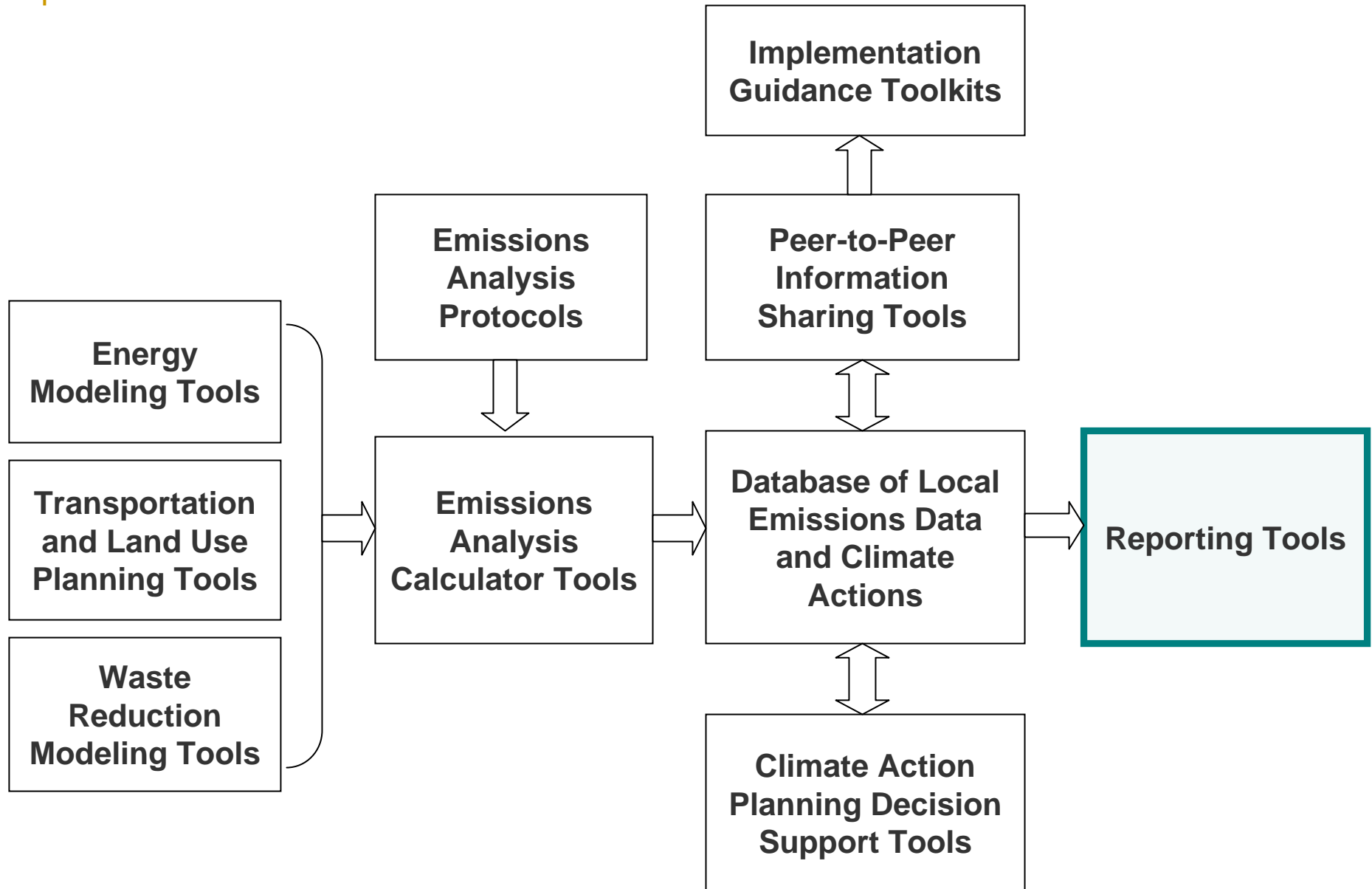


Implementation Guidance Toolkits

- Climate Action Handbook
- Milestone Guide
- Transportation and Land Use Toolkit
- Urban Forestry Toolkit
- Green Fleets Guide
- Local Climate Programs
- Example Ordinances
- Guides on:
 - Revolving Energy Funds
 - Recycling and Solid Waste
 - Green Procurement
 - Communicating Climate Change

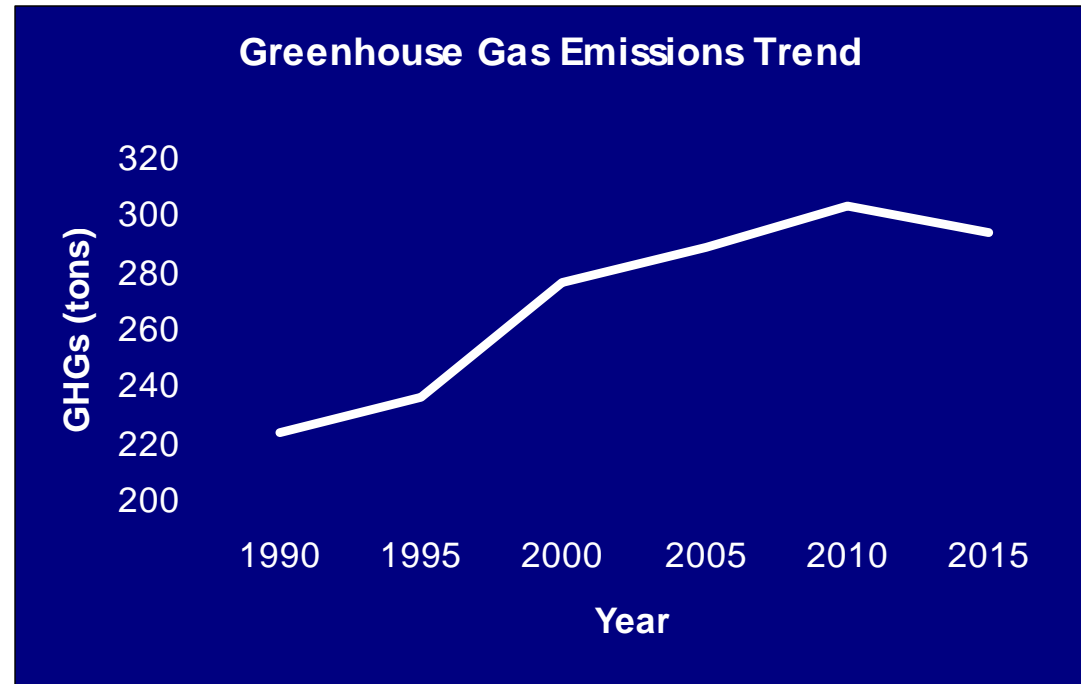


ICLEI Tools

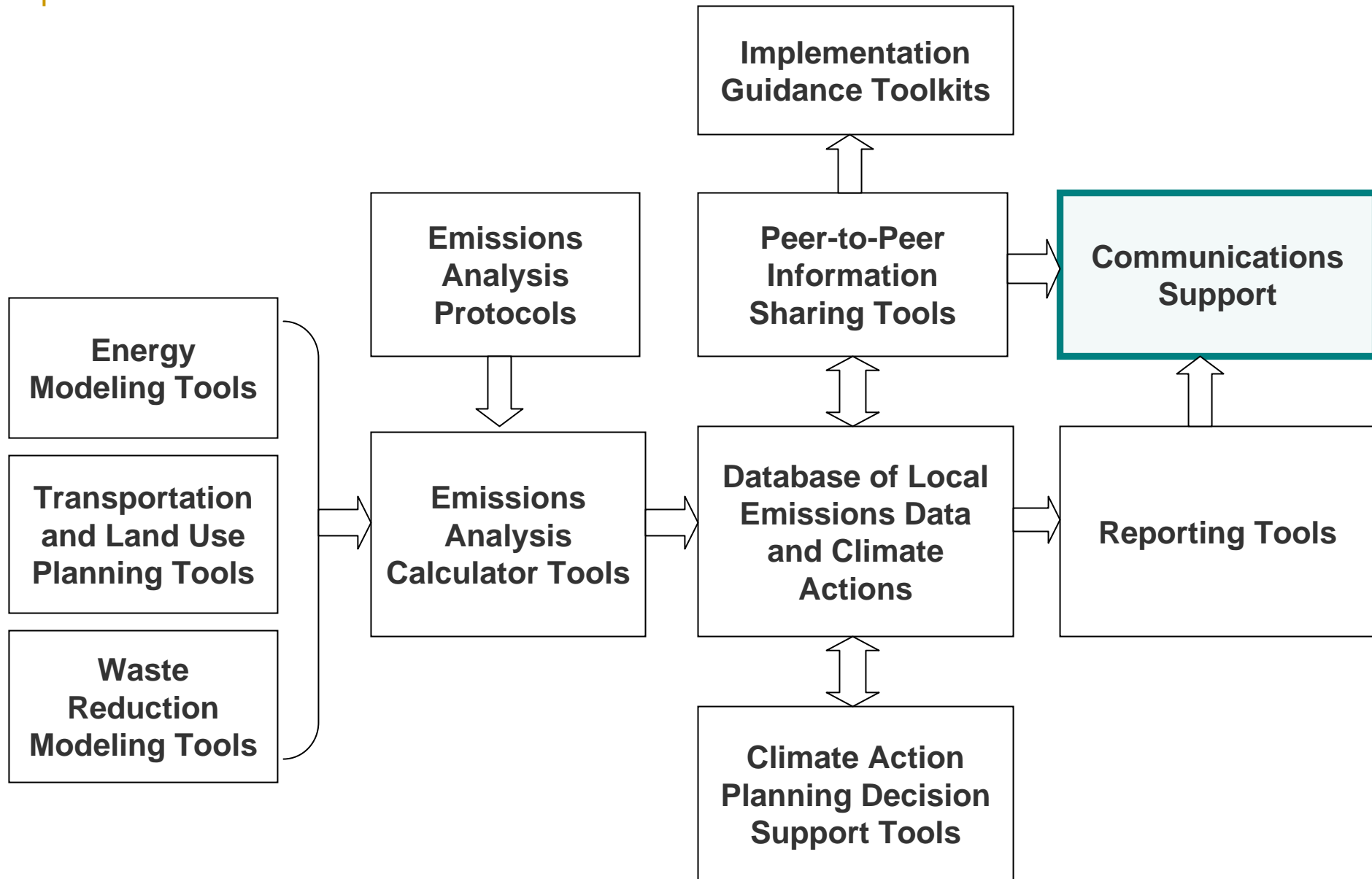


Reporting Tools

- Reporting Local Trends Over Time
- Enabling Comparison Amongst Cities
- Demonstrating Progress of the Network



ICLEI Tools

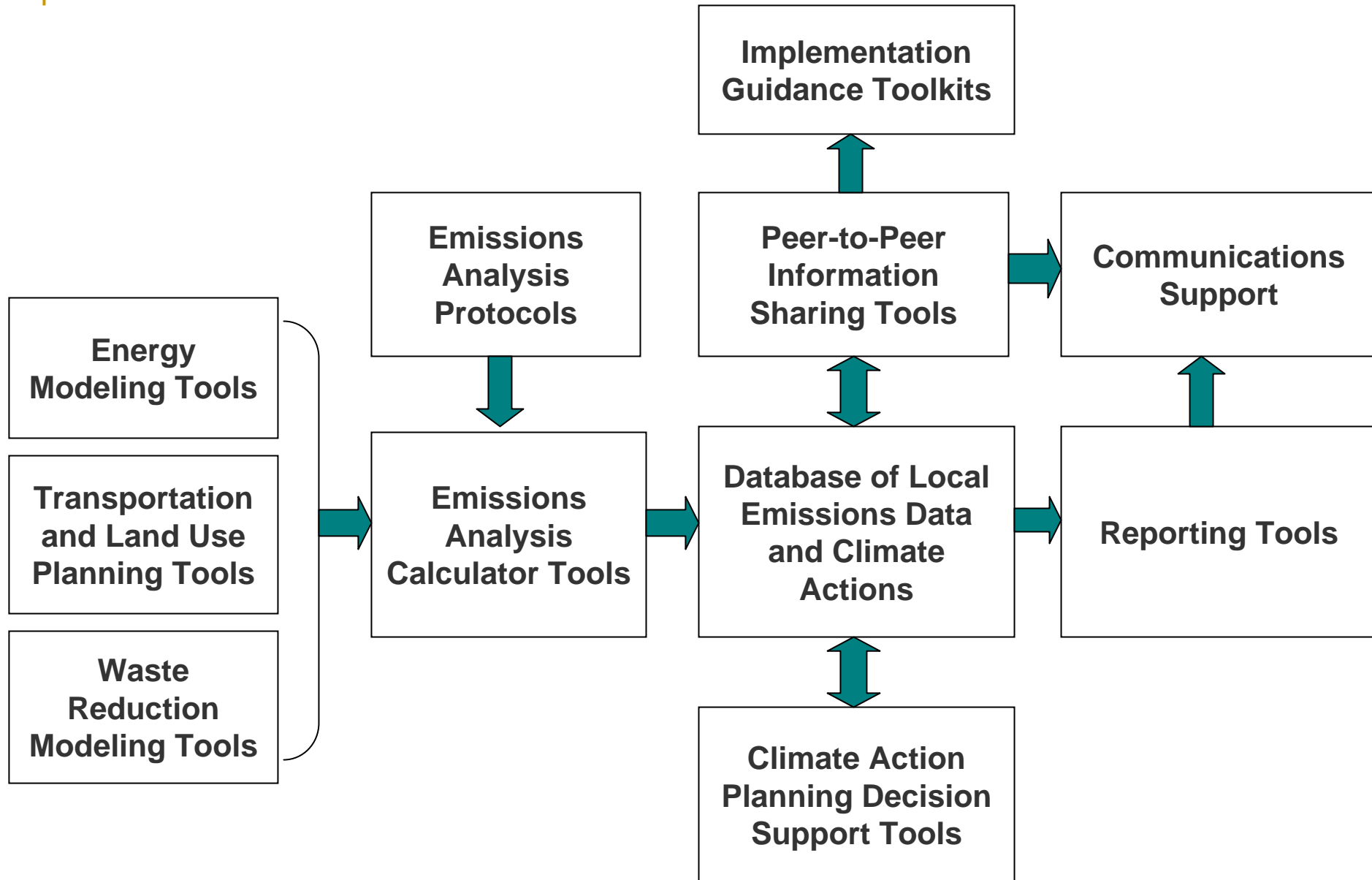


Communications Support

- www.coolmayors.org
- Local Climate Action Map
- Cool Mayor Profiles
- Mayors' Tool Room
- Local Climate Program Web Template
- Media Outreach Assistance
- Communications Toolkit



ICLEI Climate Protection Tools



Sustainability Index

- Starting in 2008 –
- A standardized framework for local governments to plan, track, and claim their environmental and sustainability work – The Star Community Index
- The Star Community Index aims to:
 - ❑ Drive integrity and rigor in actions LGs are taking to reduce climate impacts
 - ❑ Increase accountability in data and actions
 - ❑ Facilitate prioritized and informed decision making
 - ❑ Create roadmap for LGs to track and achieve climate and sustainability goals
 - ❑ Offer globally recognized green standards system for cities
 - ❑ Enable peer-to-peer learning among communities and citizen engagement
 - ❑ Engage the public in supporting and advancing their LG as a Star community



Harness the Value of ICLEI Tools

- Demonstrate Success
- Prioritize Your Efforts
- Plan Efficiently
- Implement New Climate Actions
- Lead Your Community

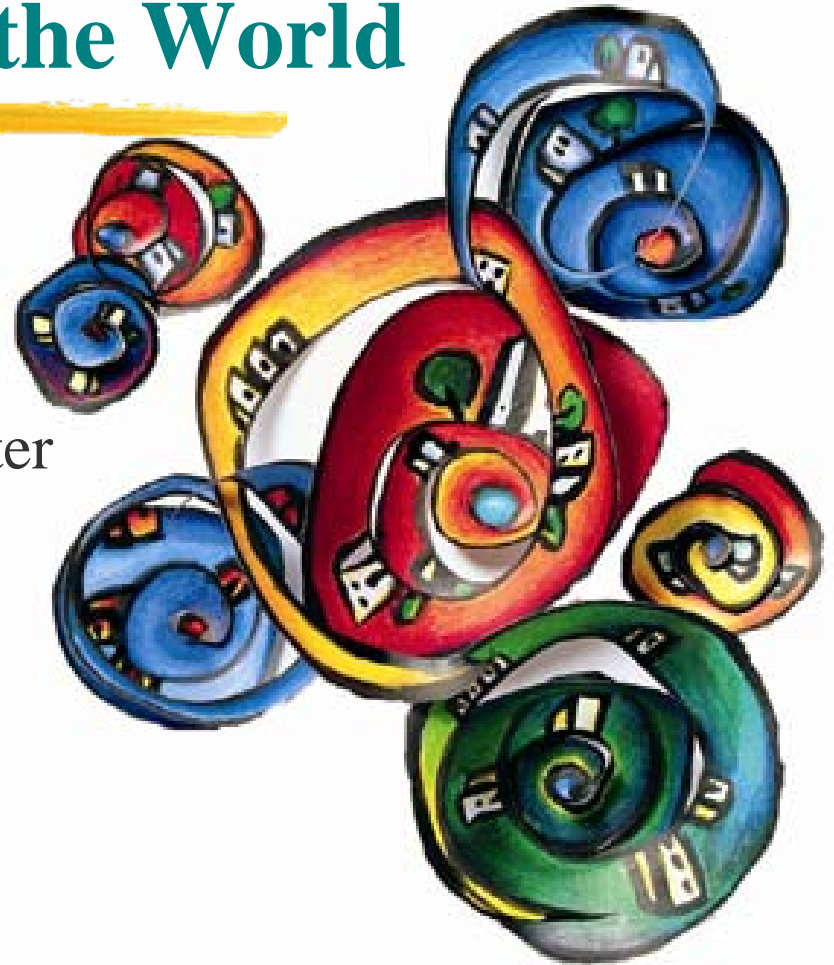


Local Action Moves the World

Kim Lundgren, Director
Northeast Regional Capacity Center
ICLEI- Local Governments for
Sustainability
617.850.9045

Kim.Lundgren@iclei.org

www.iclei.org/us



Thank You!
