

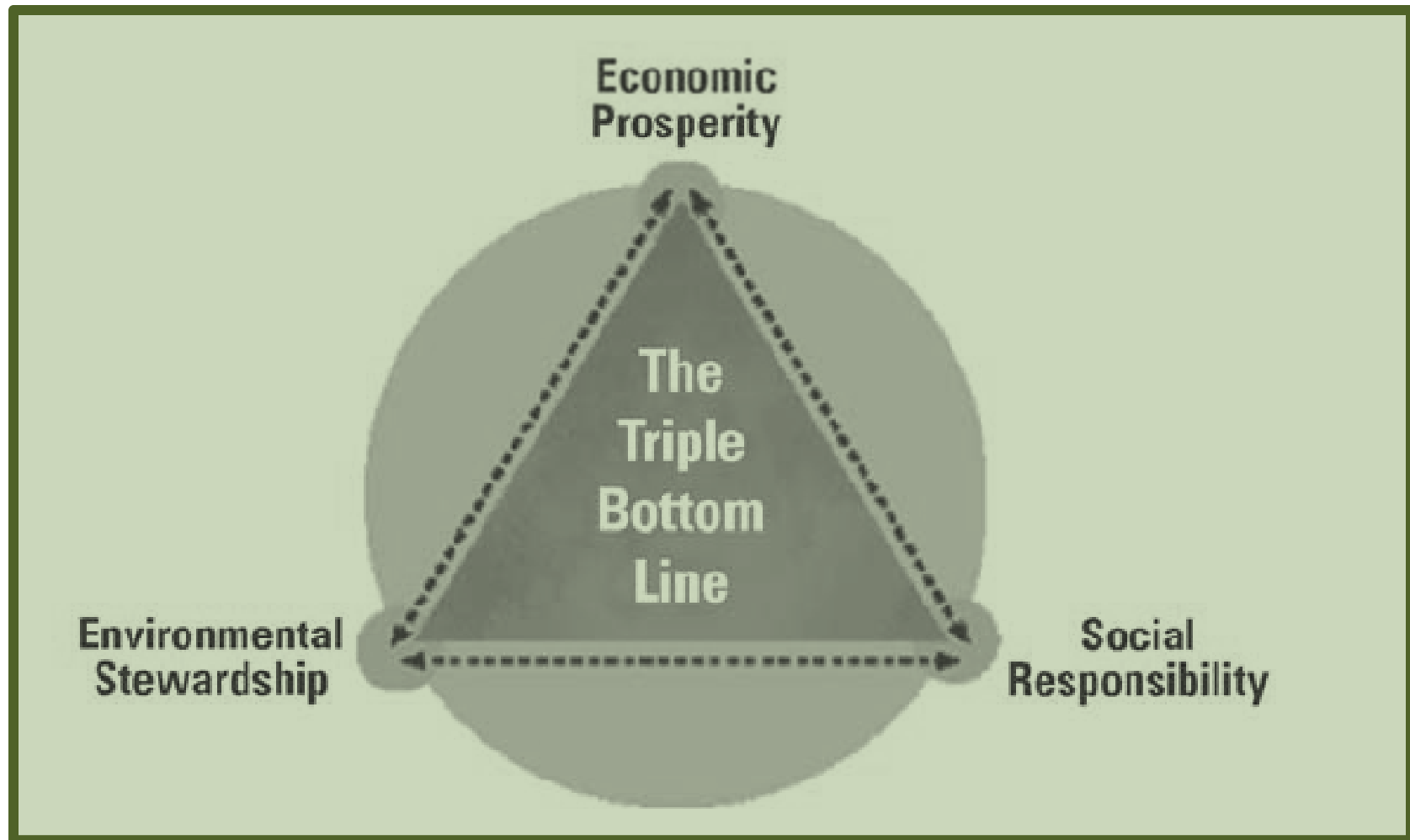


Chris Carrick, Energy Program Manager
Central New York
Regional Planning and Development Board

**Onondaga County Planning
Federation**
August 18, 2011



What is Sustainability?



Sustainable practices save money, boost the local economy, improve air quality and public health and improve livability of the community.

Why Local Governments?

Solid Waste



Energy Use

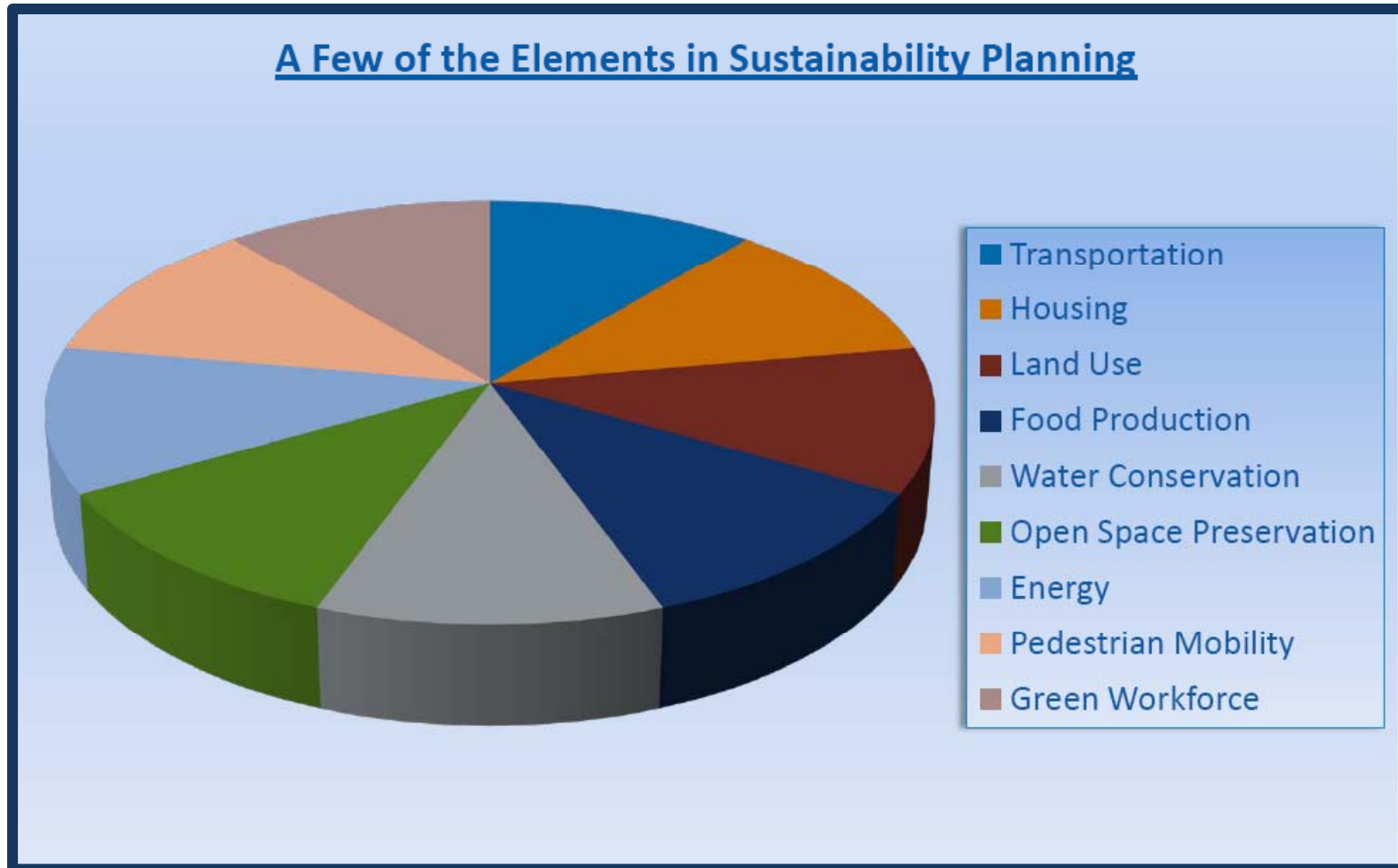


Transportation



- **Local government policies affect all major sources of greenhouse gas emissions**

What Does a Sustainability Plan Include?



Who's on First? ...Cities Taking a Lead in Sustainability Planning

America's 50 Greenest Cities

1. Portland, Ore.
2. San Francisco, Calif.
3. Boston, Mass.
4. Oakland, Calif.
5. Eugene, Ore.
6. Cambridge, Mass.
7. Berkeley, Calif.
8. Seattle, Wash.
9. Chicago, Ill.
10. Austin, Tex.
11. Minneapolis, Minn.
12. St. Paul, Minn.
13. Sunnyvale, Calif.
14. Honolulu, Hawaii
15. Fort Worth, Tex.

Source: Popular Science
<http://www.popsci.com/environment/article/2008-02/americas-50-greenest-cities?page=1>

America's Most Walkable Neighborhoods

- 1 **San Francisco**- Chinatown, Financial District, Downtown
- 2 **New York**-Tribeca, Little Italy, Soho
- 3 **Boston** -Back Bay-Beacon Hill, South End, Fenway-Kenmore
- 4 **Chicago**-Loop, Near North Side, Lincoln Park
- 5 **Philadelphia** -City Center East, City Center West, Riverfront
- 6 **Seattle**-Pioneer Square, Downtown, First Hill
- 7 **Washington D.C.**-Dupont Circle, Logan Circle, Downtown
- 8 **Long Beach**-Downtown, Belmont Shore, Belmont Heights
- 9 **Los Angeles**-Mid City West, Downtown, Hollywood
- 10 **Portland**-Pearl District, Old Town-Chinatown, Downtown
- 11 **Denver**-Lodo, Golden Triangle, Capitol Hill
- 12 **Baltimore**-Federal Hill, Fells Point, Inner Harbor
- 13 **Milwaukee**-Lower East Side, Northpoint, Murray Hill
- 14 **Cleveland**-Downtown, Ohio City-West Side, Detroit Shoreway
- 15 **Louisville**-Central Business District, Limerick, Phoenix Hill

Source: <http://www.walkscore.com/rankings/most-walkable-cities.php>

Sustain Lane's 2008 City Rankings

1. Portland, OR
2. San Francisco, CA
3. Seattle, WA
4. Chicago, IL
5. New York, NY
6. Boston, MA
7. Minneapolis, MN
8. Philadelphia, PA
9. Oakland, CA
10. Baltimore, MD
11. Denver, CO
12. Milwaukee, WI
13. Austin, TX
14. Sacramento, CA
15. Washington, DC


Source:
<http://www.sustainlane.com/us-city-rankings/overall-rankings>

Disclaimer: Rankings do not reflect the thoughts or opinions of the CNY RPDB...


Not Just for NYC and Seattle...





Cities for Climate Protection Campaign
Keene, New Hampshire
 Greenhouse Gas Emissions Inventory and Analysis Report



City of Keene, New Hampshire
 Cities for Climate Protection Campaign



KEENE, NEW HAMPSHIRE
 Adapting to Climate Change:
 Planning a Climate Resilient Community
 November 2007

Prepared by:  In association with: 


Local Action Plan

Formally Adopted by City Council on:
 February 19, 2004



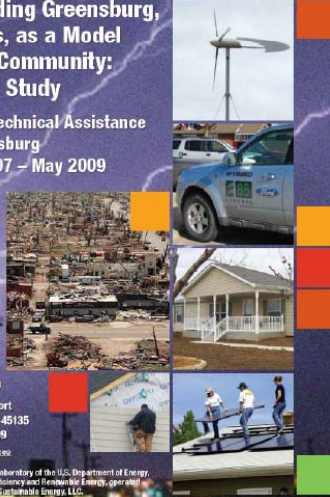
Rebuilding Greensburg,
 KS, as a Model Green
 Community: Case Study

http://www1.eere.energy.gov/buildings/greensburg/cdfs/45135_1.pdf
<http://greensburg.buildingscience.com/>

 National Renewable Energy Laboratory
 Innovation for Our Energy Future

**Rebuilding Greensburg,
 Kansas, as a Model
 Green Community:
 A Case Study**

NREL's Technical Assistance
 to Greensburg
 June 2007 – May 2009



Lynn Billman
 Technical Report
 NREL/TP-452-45135
 November 2009
 Link to Appendices

NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, operated by the Alliance for Sustainable Energy, LLC.

Greensburg, Kansas
 Pop. 1,389

Keene, New Hampshire
 Pop. 22,893

Local-Level Sustainability Planning

- Brattleboro, VT – pop. 16,000
 - Climate Action Plan (2003)



- Claremont, CA – pop. 37,000
 - Sustainable City Plan (2008)



- Boulder, CO – pop. 92,000
 - Sustainable Energy Plan (2008)



- Austin, TX – pop. 650,000
 - Smart Growth Initiative (1999)



- Pioneer Valley Planning Commission, MA – pop. 608,000
 - Pioneer Valley Clean Energy Plan (2008)



- Assoc. of Monterey Bay Area Gov'ts, CA – pop. 748,000
 - Monterey Bay Regional Energy Plan (2006, 2008 update)



- San Diego Association of Gov'ts, CA – pop. 2.3 million
 - Energy 2030: The San Diego Regional Energy Strategy (2006)



Town of Dewitt Sustainability Policy

Updated and Unanimously
Approved By
DeWitt Town Board on
December 13, 2010

Town of DeWitt Sustainability Policy

Town Board Members

Edward Michalenko, Ph.D., Supervisor

Anthony Albanese
Kenneth Andrews
Vicki Baker
Kerry Mannion
Brian Schultz
Irene Scruton

DeWitt Sustainability Committee

Hon. Vicki Baker, Chair
Laura Bradford
Dr. Chris Carrick
Eileen Clinton
Alan Drucker
Ilana Kanfer
Dr. Caroline Tauxe
Michael J. Wallace, Esq.

Policy Statement 1: Ensure Energy-Efficient and Environmentally Supportive DeWitt Town Codes, Plans and Policies:

Policy Statement 2: Improve Energy Efficiency and Green Practices of Existing Town Buildings:

Policy Statement 3: Build Very Efficient New or Renovated Buildings:

Policy Statement 4: Educate Employees About Sustainable Practices:

Policy Statement 5: Support the Reduction of Energy Use by Homeowners, Developers, and Landlords:

Policy Statement 6: Reduce Dependence on Traditionally-Powered Vehicles:

Policy Statement 7: Reduce Storm Water Runoff and Increase Storm Water Quality:

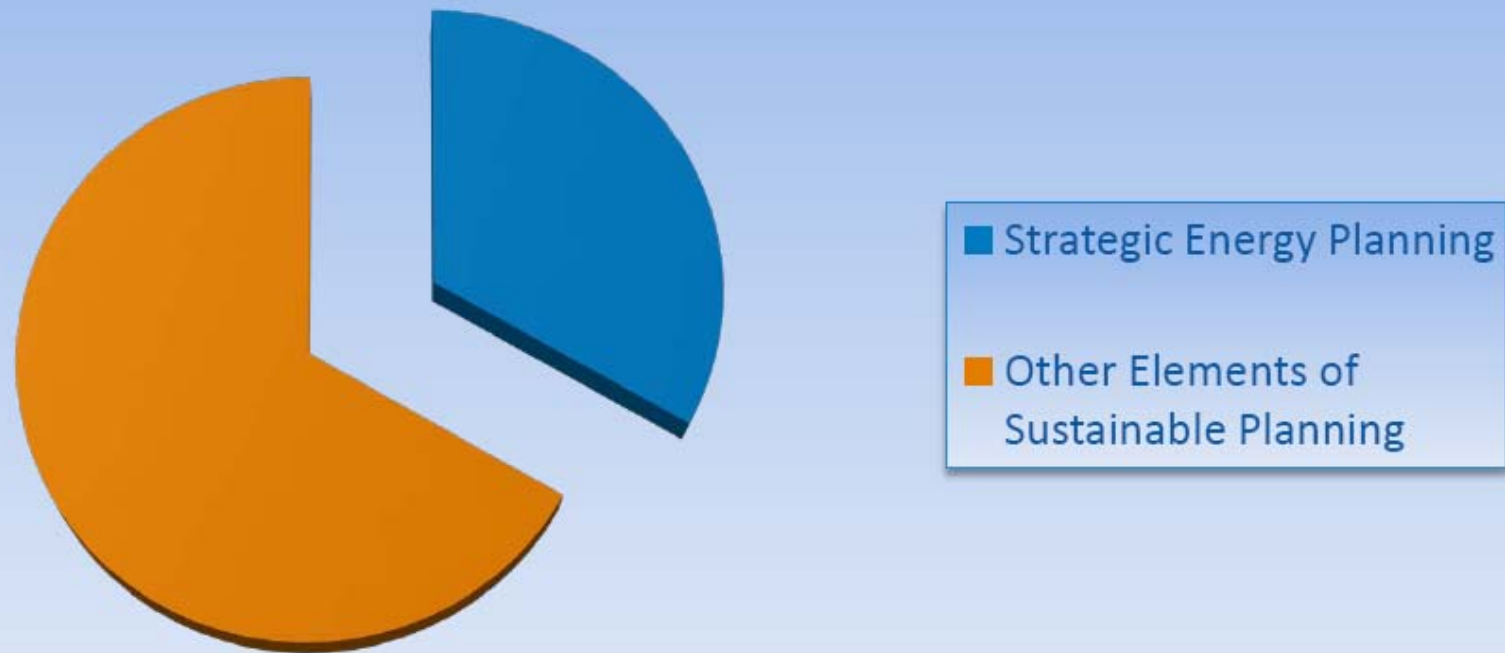
Policy Statement 8: Encourage Green Economic Development:

Policy Statement 9: Include Sustainable Land Use and Transportation Practices in Town Zoning Ordinance & Comprehensive Plan:

Policy Statement 10: Enhance Accessibility of Our Community to People with Disabilities:

How Does Strategic Energy Planning Fit In?

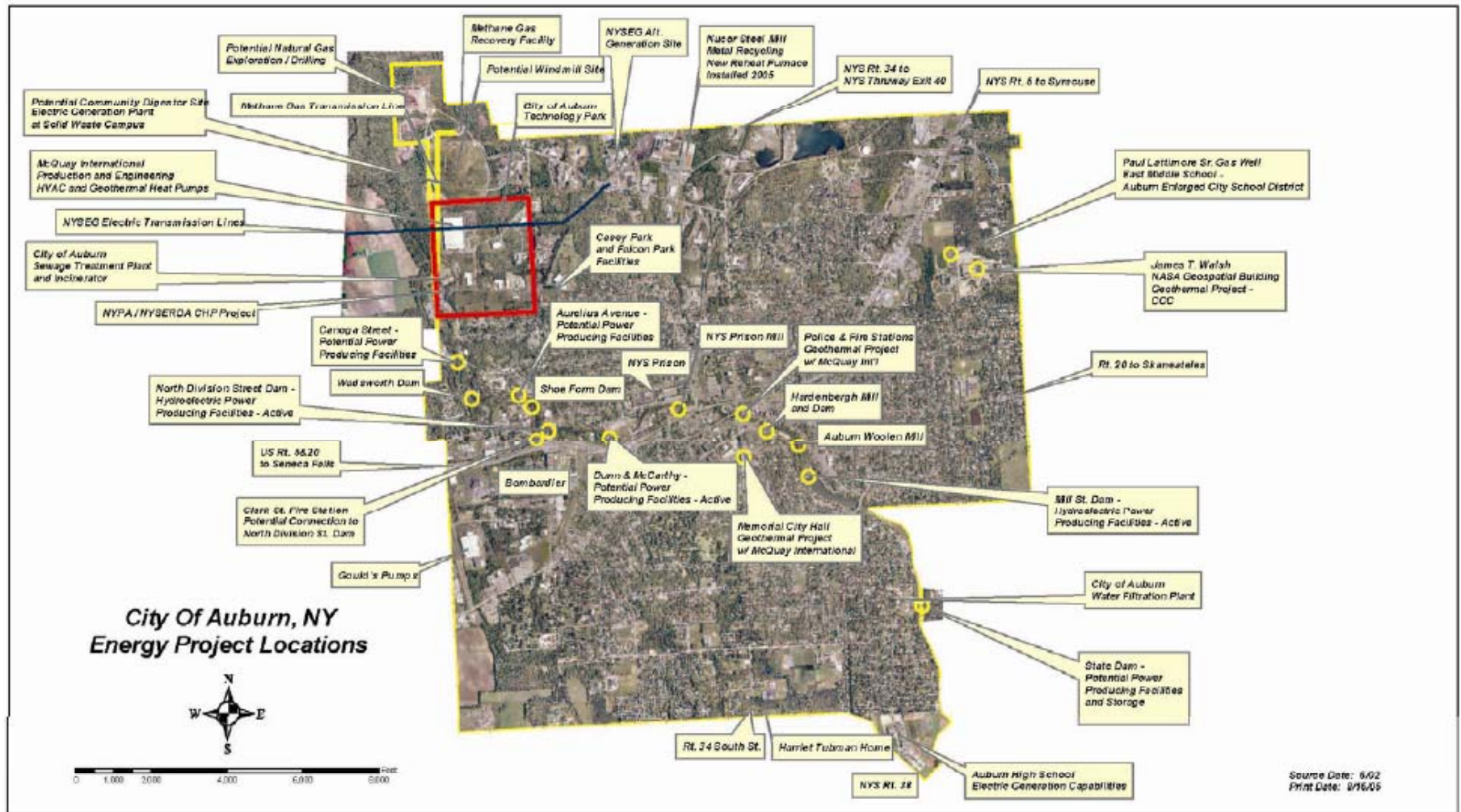
Strategic Energy Planning is Part of Sustainability Planning



Municipalities and Energy

- Energy costs can account for as much as **10 percent** of a local government's operating cost.
- Electricity costs account for over **50 percent** of total energy spending in most local governments in New York.
- Approximately **35 percent** of a typical municipality's energy budget is allocated to municipal water use and treatment.
- Approximately **1.5 to 2 percent** of the total energy consumed in New York State is consumed by municipal wastewater treatment facilities.
- New York's average electric rate has increased **63 percent** since 1990 with the largest annual increases occurring in the most recent years.
- New York's counties increased their 2007 electricity budgets by up to **20 percent** according to a report by the NY Association of Counties.

Local-Level Energy Planning: Auburn, NY



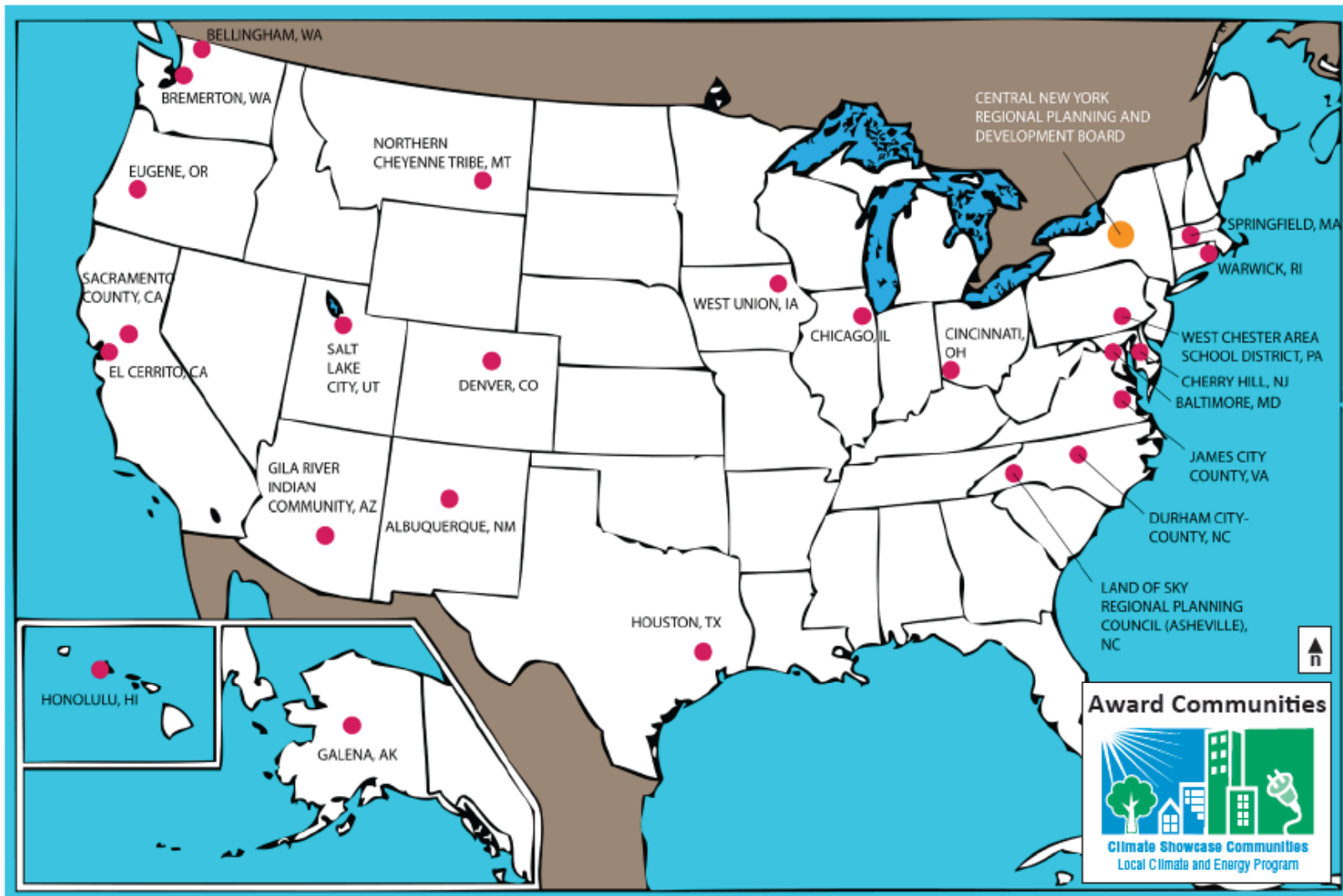


Governments can lead by example by implementing programs within their own buildings and operations that reduce greenhouse gas emissions and save energy and money.

EPA Climate Showcase Communities

- + competitive grant program launched in 2009 to assist local and tribal governments in establishing climate change initiatives
- + create replicable models of sustainable community action that generate cost-effective and persistent greenhouse gas reductions while improving overall community livability

EPA CLIMATE SHOWCASE COMMUNITIES AWARD COMMUNITIES 2009





Municipal Energy Planning

The CNY RPDB **assists local governments** with accessing **funding** and **technical assistance** through state and federal agencies and offers services including **inventorying energy use**; **implementing energy reduction strategies**, **clean energy projects**, and **policies to support renewable energy technologies**.

Project Development

The CNY RPDB **manages** the clean energy project development process for municipal and institutional energy users, including identifying **project opportunities**, **leading feasibility studies**, **securing funding**, and **working with technology providers**.

Public Education and Outreach

The CNY RPDB **educates** the public about the benefits of **clean energy** and promotes participation in utility and public programs. **We conduct customized informational workshops** for residential, commercial, municipal, and institutional energy users.



The Program

- + Participants were selected through a competitive process - 8 Municipalities over 3 years within the 5 CNY RPDB Counties
- + Participants must complete a carbon inventory of their local government operations and a local climate action plan
- + Participants will receive up to \$30,000 for demonstration projects (i.e., facilities retrofit, upgrading municipal fleets, or renewable energy feasibility analysis)

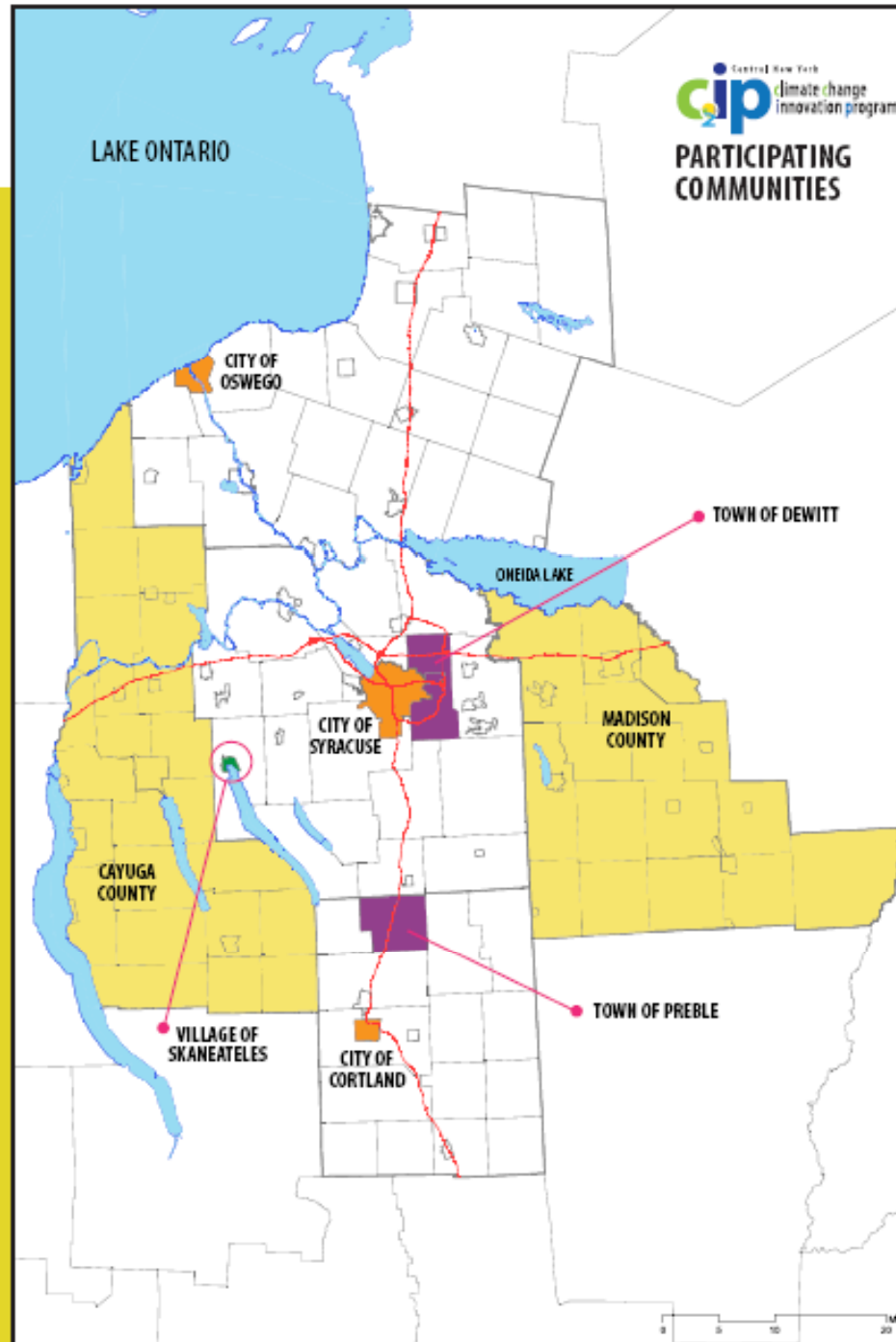


Over the next three years eight Central New York local governments will improve energy performance through planning, project development and public outreach.

Funding provided by the U.S. EPA
Local Climate and Energy Program



Climate Showcase Communities
Local Climate and Energy Program



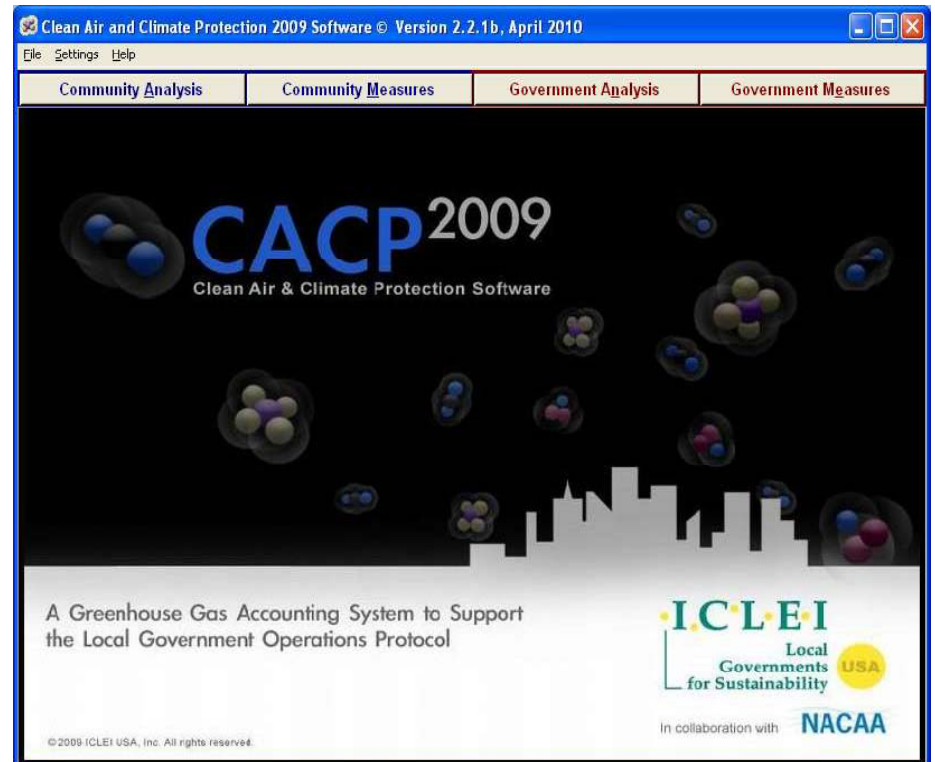
The Program

- + Participants will be provided with financial assistance to join ICLEI USA
- + CNY RPDB will assist in the development and coordination of public outreach to encourage the general public to commit to individual energy saving goals
- + CNY RPDB will review municipal land use and zoning ordinances and make recommendations for modifications



ICLEI Technical Assistance

- Carbon calculation software
 - (CACP 2009)
- Data collection forms
- Greenhouse Gas Inventory
- Trainings
- On-demand technical support



New York ICLEI Members



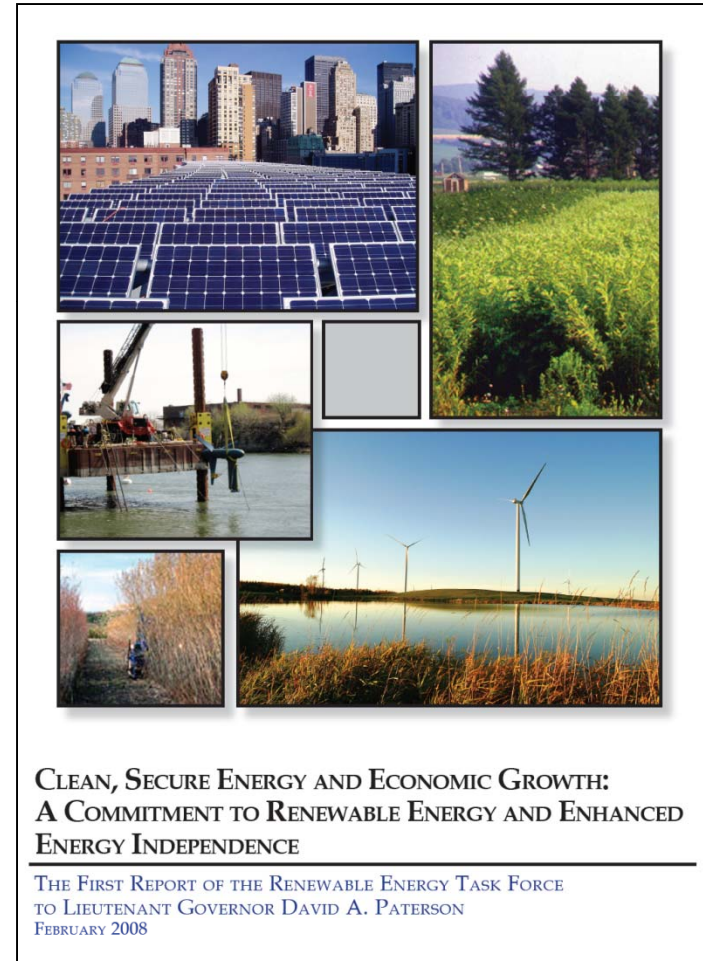
- Albany
- Babylon
- Bedford
- Binghamton
- Brighton
- Brookhaven
- Clarkstown
- Clermont
- Cooperstown
- Cortlandt
- Croton on Hudson
- DeWitt
- Dobbs Ferry
- Dryden
- Eastchester
- Geneva
- Greenburgh
- Hastings on Hudson
- Hunter
- Huntington
- Ithaca (City)
- Ithaca (Town)

- Larchmont
- Mamaroneck (Town)
- Mamaroneck (Village)
- Mount Kisco
- New Castle
- New Paltz (Town)
- New Rochelle
- New York City
- North Castle
- North Hempstead
- Ogdensburg
- Onondaga County
- Orangetown
- Ossining (Town)
- Ossining (Village)
- Oswego (County)
- Peekskill
- Pound Ridge
- Red Hook

- Rochester
- Rosendale
- Rye
- Saratoga Springs
- Saugerties
- Skaneateles
- Somers
- Southampton (Town)
- Southampton (Village)
- St. Lawrence County
- Syracuse
- Tarrytown
- Tompkins County
- Tuckahoe
- Victor
- Westchester County
- Woodstock
- Yonkers

Municipal Governments Play a Critical Role

“Renewable energy installers and potential owners face a patchwork of widely differing local government permitting requirements as well as home owner association (HOA) restrictions, which create hurdles to the efficient and widespread installation of renewable energy systems such as PV, solar thermal and small wind.”

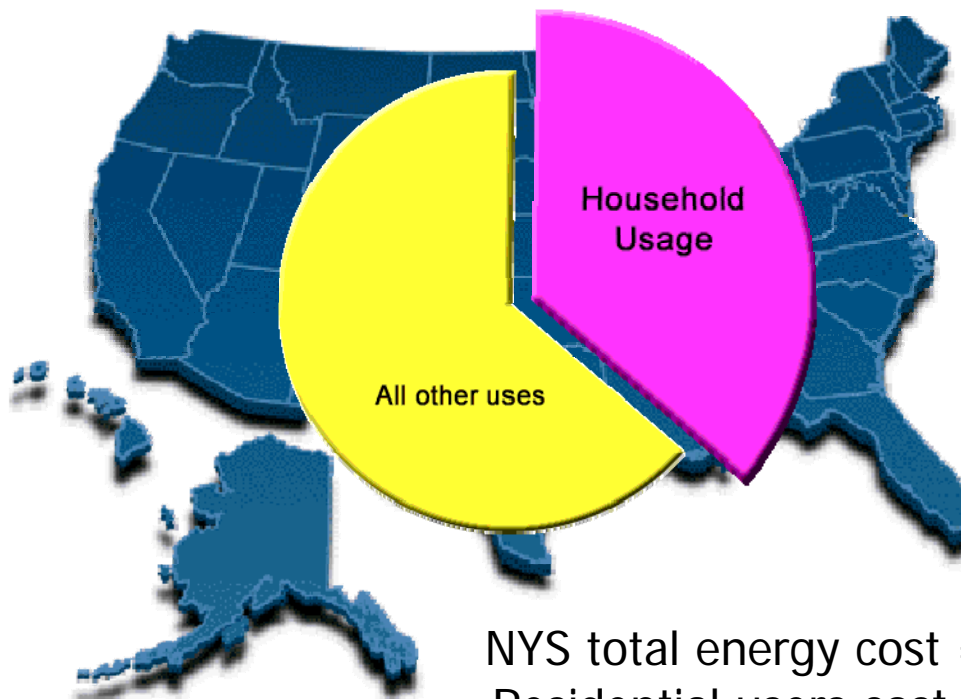


Local Permitting

- A recent DOE report claims that installation costs can be reduced by 50 cents per watt simply by harmonizing the solar permitting process from town to town.
- Inconsistencies in permitting can cost consumers up to \$2,500 on a 5-kilowatt rooftop solar system.
- Wasted money from permitting inefficiencies "looks like a \$1 billion tax on solar over the next five years."



Energy Use in the Residential Sector



Residential use
comprises
1/3 of U.S. energy
consumption.

NYS total energy cost = **\$72.2 Billion**
Residential users cost = **\$20.6 Billion**
(about 30%)

Many opportunities to decrease this amount

Residential Electricity Use in CNY

County	Utility	2005 Personal Income	Avg Annual electric Bill per Customer (2005)	% of 2005 Annual Income spent on Electric Bill
Cortland	National Grid	24,772	1,203	4.9%
Oswego	National Grid	24,578	1,049	4.3%
Cayuga	NYSEG	27,107	1,203	3.9%
Madison	NYSEG	28,378	1,176	3.6%
Onondaga	National Grid	33,751	780	3.4%

Who Will
Be The
"Biggest
Loser?"

Every
Action
Counts!



CENTRAL NEW YORK
ENERGY
CHALLENGE



*Cazenovia
Area*

Sponsored by:



central new york energy CHALLENGE




join
the
challenge

energy
saving
tips

tell us
your
story

Join the **Central New York Energy Challenge** and **discover** new ways to save energy, **challenge** yourself to **take action**, and help us to **share** your accomplishments with others. Together we can **make a difference** in Central New York!

home contact us

connect with us    

JOIN THE CHALLENGE > CHALLENGE INITIATIVES > ACTION AREAS > CHALLENGE BLOG >



Hey, Central New York - Join the Movement!

Join now ▶

1 2 3 4



Municipal Climate Action Workshop

On February 17, 2011 representatives from nine Central New York Municipalities met at the Central New York Regional Planning and Development Board for a half day workshop focused o...



Your Stories:



Ever wonder what your neighbors are doing to save energy? Check out their stories and see what cool stuff you could be doing....

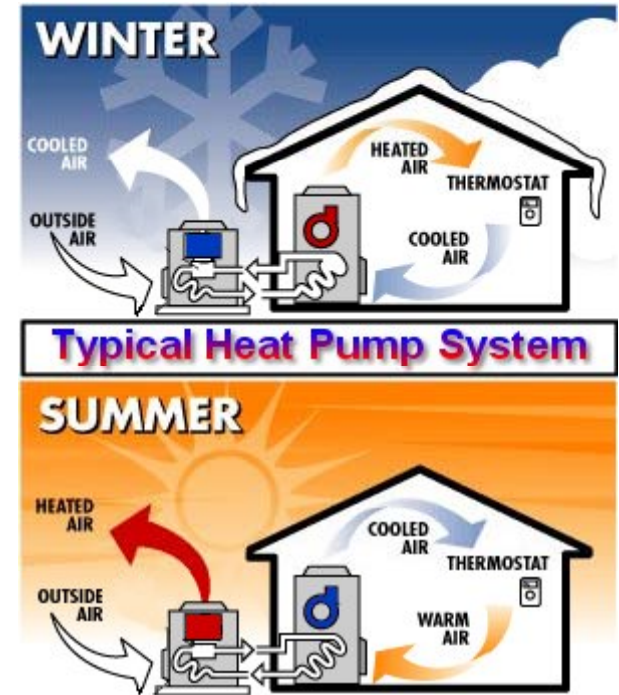
Read on! ▼

Town of Dewitt



- 50 kW roof-mounted system
- Public and web-based display
- Will produce 11% of total electric usage, saving about \$8,000/year and reducing GHG emissions equal to 4.6 average homes per year

Preble Town Hall



Village of Skaneateles



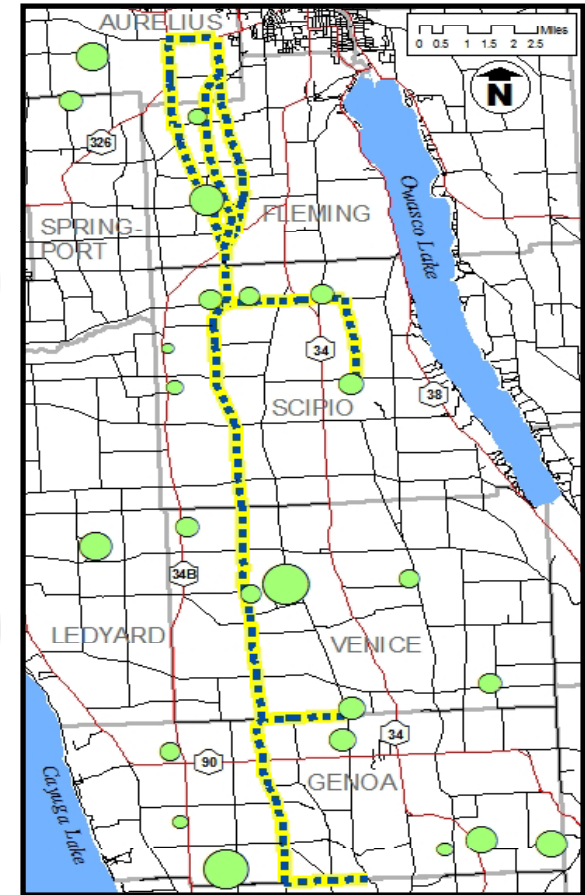
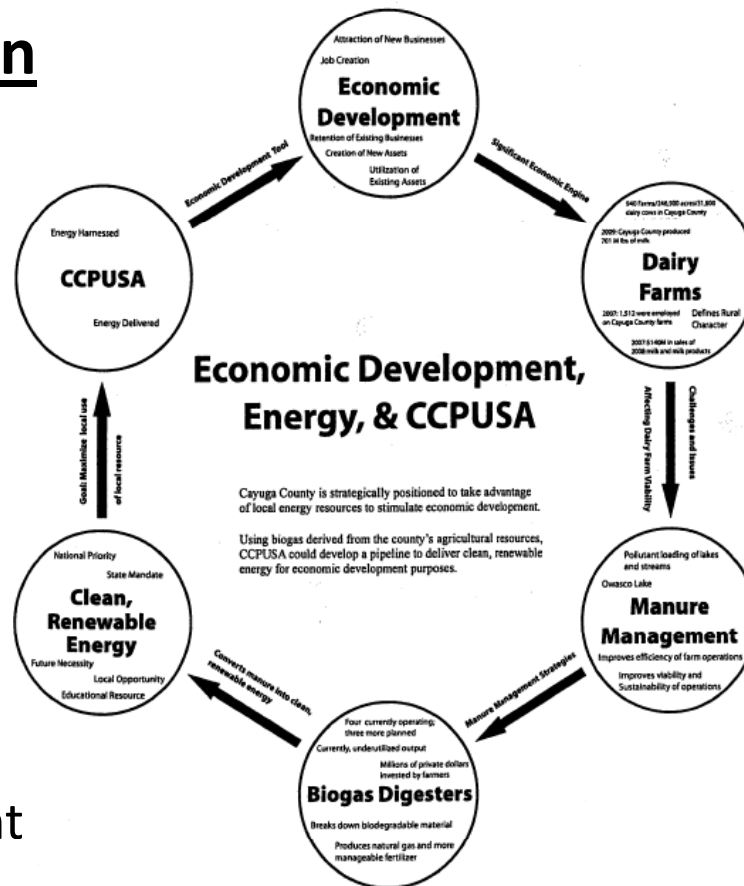
- NYPA and EPRI – project sponsors
- Solar power to charge electric and plug-in hybrid electric vehicles
- Reduced emissions and lower fuel cost

Cayuga County Regional Digester Project

“The Milky Way”

Project Description

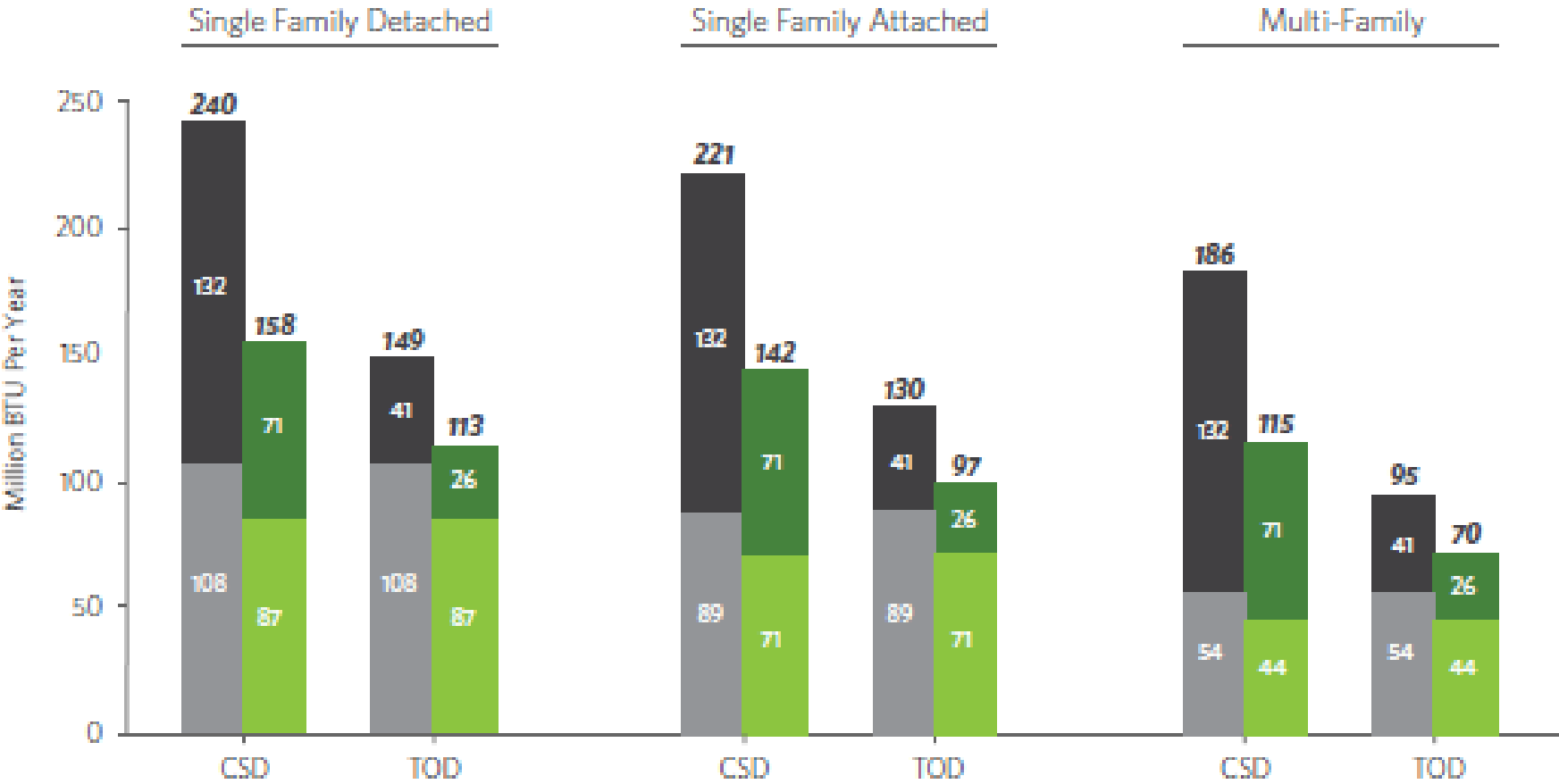
- Forty mile pipeline
- 10 or more farms involved
- Main pipeline and feeder lines
- Biogas piped from biodigesters through pipeline to County IDA site in Auburn for economic development



Source: Frank Howe, American Farmland Trust Conference, March 25, 2009

Location Efficiency: Household and Transportation Energy Use by Location

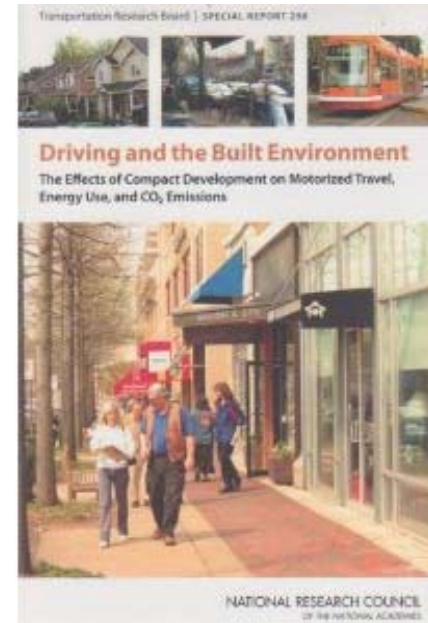
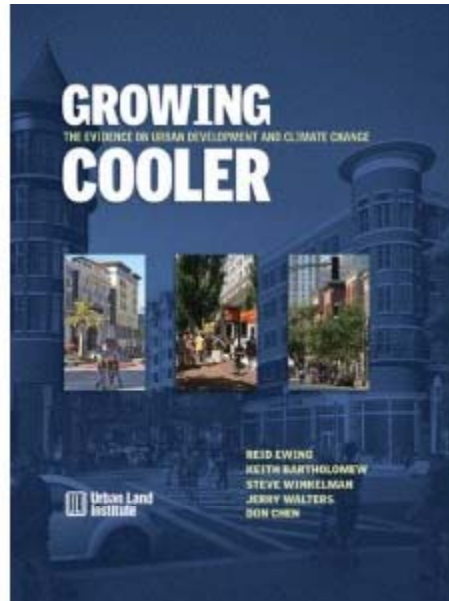
Transportation Energy Use
 W/ Green Automobiles
 Home Energy Use
 W/ Green Buildings



CSD - Conventional Suburban Development

TOD - Transit Oriented Development

Urban Form, VMT and GHG Emissions

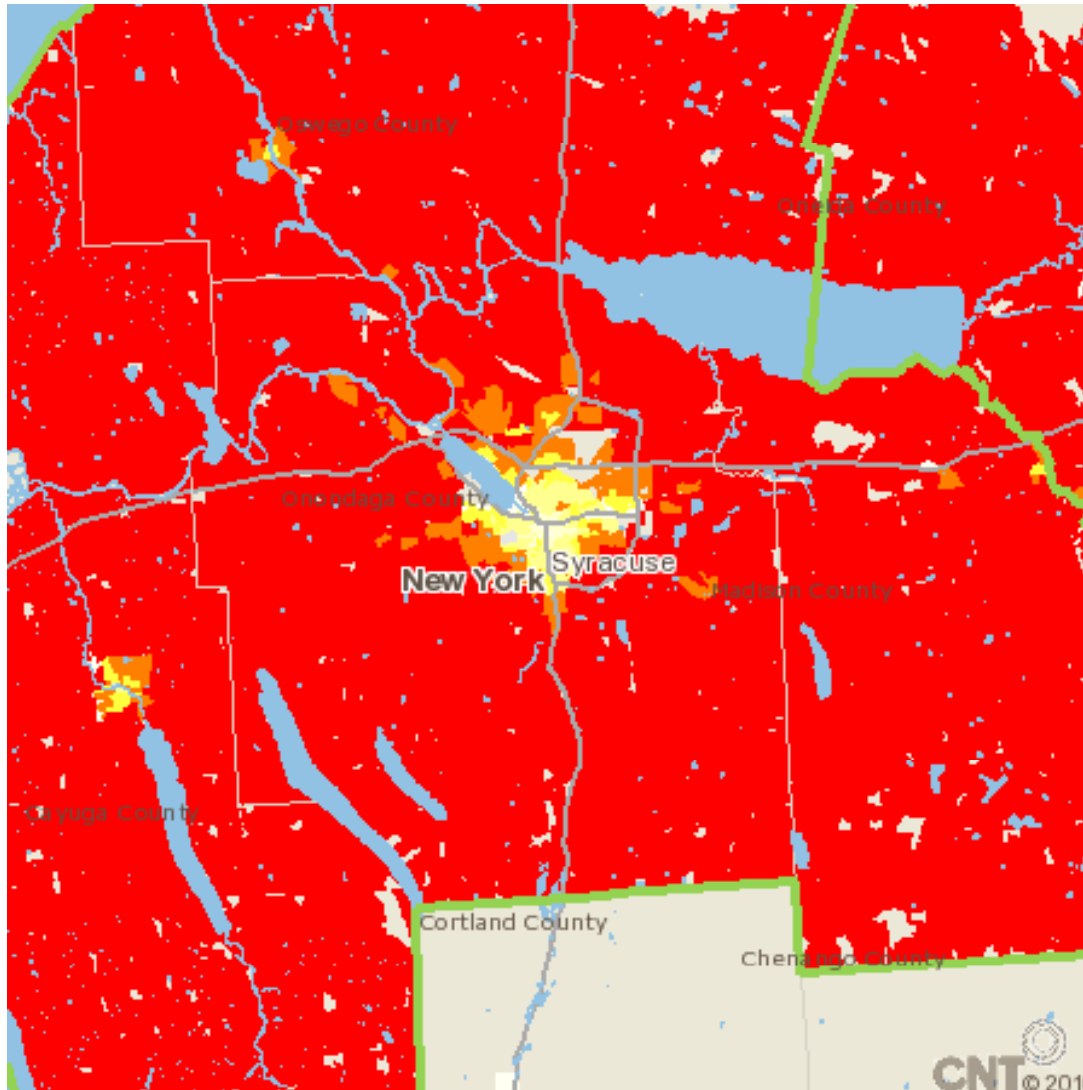


At a Glance: VMT and GHG Reduction Estimates from Compact Development (vs. Typical Suburban Development)

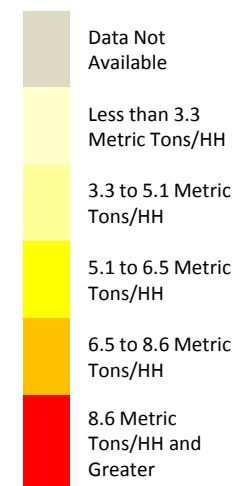
Study	VMT Reductions	GHG Reductions
<i>Moving Cooler</i>	20–60 percent	20–60 percent
<i>Growing Cooler</i>	20–40 percent	18–36 percent
<i>Driving and the Built Environment</i>	5–12 to 25 percent	5–12 to 25 percent

The studies show reductions in VMT of between 8 and 18 percent, on a national basis, when compact development makes up 60 percent or more of all future development between now and 2050.

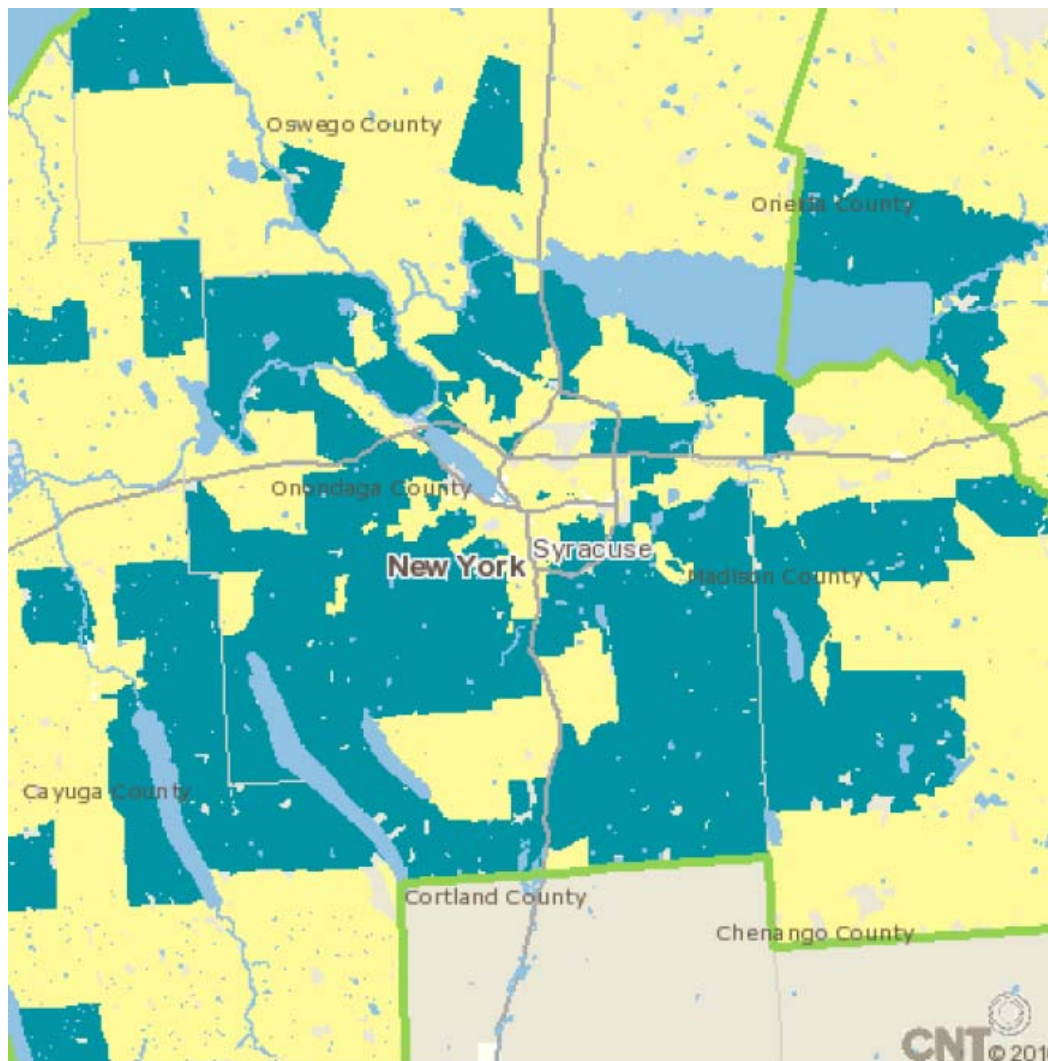
CO2 per Household from Auto Use



Center for
Neighborhood
Technology







Housing & Transportation Affordability Index



Center for
Neighborhood
Technology

Scales of Urban Form and Policy Instruments to Impact GHG Emissions

Scale	Urban Form	Common Policies
Building, parcel		Building codes, zoning bylaws, development guidelines
Block, neighborhood, district		Local area plans, concept plans, community visions, development guidelines
Municipality		Municipal development plans, comprehensive plans
Region, bioregion, megaregion		Regional growth strategies, regional visions, regional transportation plans

Where Do We Start?

APA Planners Energy and
Climate Database

[http://www.planning.org/research/energy/database/index
_htm](http://www.planning.org/research/energy/database/index.htm)

Rocky Mountain Land Use Institute:
Sustainable Community Development
Code Initiative

[http://www.law.du.edu/index.php/rmlui/sustainable-
community-development-code](http://www.law.du.edu/index.php/rmlui/sustainable-community-development-code)

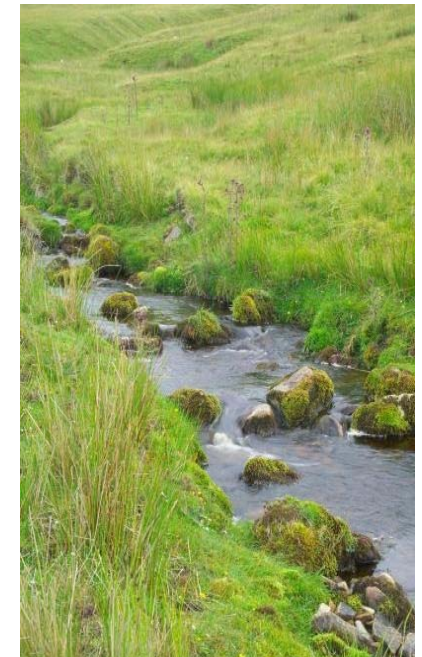
Organizations that Support Municipal Sustainability Planning



Tie to Issues of Public Concern



- Fuel cost savings
- Economic development
- Innovation and leadership
- Increased livability, comfort, security, convenience
- Cleaner air
- GHG reduction goals



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NYSERDA E\$C Coordinator

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www.cnyrpdb.org



thank
you



Central New York Regional Planning & Development Board

An Independent Contractor to:

