LOCAL GOVERNMENT AND SUSTAINABLE ENERGY:
Town of Greenburgh

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Energy Conservation Coordinator
Town of Greenburgh
Town of Greenburgh: From Energy Conservation to Climate Protection

- Energy Star® code for new residential construction: Fall 2002 (Pace Energy Project)
- Energy Conservation Coordinator appointed: Winter 2003
- NYSERDA Energy Smart Community: Spring 2003
- U.S. Mayors’ Climate Protection Agreement: Spring 2006
- ICLEI membership: Fall 2006
REDUCING EMISSIONS

IN THE COMMUNITY

IN GOVERNMENT FACILITIES AND OPERATIONS
REDUCING EMISSIONS: Community

Focusing on energy use in:
- New Construction
- Existing Buildings
- Transportation
REDUCING EMISSIONS: New Construction

LOCAL GOVT. OPPORTUNITY—change building codes/procedures for new construction to promote:

- Energy efficiency
- Other green building practices
- Renewable energy such as solar
REDUCING EMISSIONS: Community

New Residential Construction: Greenburgh’s Building Code

Chapter 100, BUILDING, FIRE AND PLUMBING

§ 100-14 Energy Star requirements.

[Added 8-21-2002 by L.L. No. 3-2002]

“No building permit shall issue for any new one- or two-family dwelling or multifamily dwelling of three stories or less unless the applicant certifies that the dwelling will meet the requirements for a New York ENERGY STAR®-labeled home.”
§ 100-4 Definitions.

“NEW YORK ENERGY STAR®-LABELED HOME -- Any new one-or two-family dwelling or multifamily dwelling of three stories or less, as defined in § 285-5, including townhouses, built to achieve a home energy rating of 86 or higher on a scale created under the home energy rating system established pursuant to the National Home Energy Rating Technical Guidelines issued by the National Association of State Energy Officials and dated September 19, 1999, and which meets the following two additional requirements: [Added 8-21-2002 by L.L. No. 3-2002]

A. Includes a total of 300 kilowatt hours per dwelling unit of estimated annual savings from ENERGY STAR®-labeled lighting and appliances; and

B. Includes the capability to deliver automatically controlled mechanical ventilation of at least 15 cubic feet per minute per dwelling unit plus an additional 15 cubic feet per minute per bedroom.”
ENERGY STAR® Labeled Home

- Independent Home Energy Raters help ENERGY STAR builder partners choose the most appropriate energy-saving features.
- Raters conduct onsite testing and inspections to verify that the homes qualify as ENERGY STAR.
(Example: a Netherlands town that **requires** solar on all new homes...)  
Photo courtesy of Steven J. Strong
REDUCING EMISSIONS: Community

New Commercial Construction

- Informational procedure required for Planning Board applicants
  - Opportunities, NYSERDA programs/incentives
- Exploring code requirement and/or incentives; LEED-NC or Energy Star
REDUCING EMISSIONS: Existing Buildings

LOCAL GOVT. OPPORTUNITY—educate community, raise awareness & create consumer demand
REDUCING EMISSIONS: Community

-existing Buildings: outreach on energy efficiency, conservation, renewable energy, & climate change action

-Residential
  -1-4 family homes
  -Multifamily buildings

-Business

-Churches

-Schools
EXISTING BUILDINGS: Programs & Information

NYSERDA (NYS Energy Research & Development Authority) programs & incentives

- www.getenergysmart.org
- www.nyserda.org
- www.powernaturally.org

Local utility info

Department of Energy

Green building organizations
REDUCING EMISSIONS: Community

- Outreach promoting other emission-reducing & “green” actions
  - Buying green power
  - Water conservation
  - Transportation
    - Saving gasoline, alternative fuels, commuter choice, ride sharing, etc.
  - Buying local
Methods of Outreach

- Literature displays
- Lobby solar display
- Web page
- E-mail notices to public & groups, e.g. architects
- Cable access TV “The Energy Show”
- Promote local examples
Methods of Outreach

- Energy fairs
- Event tables & CFL bulb sales
- Presentations to community groups
- Conferences & seminars for business
- Partner with associations
Methods of Outreach

Schools
- Coordinate projects/events with teachers
- Notify teachers & administrators about training opportunities etc.
REDUCING EMISSIONS: GOVERNMENT

LOCAL GOVT. OPPORTUNITY: Save energy in own operations
- Benefit the environment
- Save taxpayer money
- Serve as model for the community
REDUCING EMISSIONS: GOVERNMENT

- Buildings
- Transportation
- Recycling
- Procurement/purchasing
- Buying Green Power
GOVERNMENT: BUILDINGS

🌿 New construction & renovation
   🌿 New library addition plans green, geothermal

🌿 Existing buildings
   🌿 Energy efficiency audits & retrofits
   🌿 Energy management
   🌿 Energy performance contracting
   🌿 Solar energy
Town Hall 2006 Retrofit

- NYPAs High Efficiency Lighting Program
  - Energy-efficient lighting and ballasts
  - Occupancy sensors
- Annual savings (approx.)
  - $26,600
  - 310,000 kWh
- Also reduces demand charge
Solar Energy: Town Hall PV System

- Installed April 2006
- NYSERDA grant: PON 843
- Demonstration size: 5.6kW
- About 6,840 kWh electricity per year
- Will reduce CO2 emissions by about 7,460 lbs/yr
Town Hall Lobby Solar Energy Display: PV data & educational info
GOVERNMENT: TRANSPORTATION

FLEET

- A few alternative fuel vehicles
  - GEM cars (electric)
  - CNG truck

Challenges

Policies

- Idling reduction
- Exploring biodiesel
GOVERNMENT: TRANSPORTATION

COMMUTER CHOICE FOR EMPLOYEES

- Planned transportation demand management program for employees with MetroPool
- MetroPool encourages the use of transportation alternatives such as carpooling, vanpooling, riding the bus or train, bicycling, walking, compressed work weeks and telecommuting
GOVERNMENT

RECYCLING

❖ Working to improve existing office recycling program
❖ County & NYS DEC resources

PURCHASING

❖ Energy Star® procurement policy
GOVERNMENT: BUYING GREEN POWER

✿ Town Council awaiting explicit legal permission to “pay more” for wind power

✿ Cf. other NY municipalities (e.g. Irvington, Croton)

✿ Potential action: NYS legislation
NEXT STEPS

- Implement ICLEI tools:
  - Software for emissions measurement & planning
  - Action steps
- Carbon footprint
A FEW THOUGHTS

Common goal/standards/terms that can be shared by community & govt. to align behaviors (cf. WWII)

Need paradigm shift in thinking & quantum leap in speed

Management issue: integrate green principles into every dept. (vs. “silos”)

Inspiration: City of Chicago

Performance management; Good to Great
RESOURCES

US Mayors’ Climate Protection Agreement: resources for local governments
www.seattle.gov/climate/govResources.htm
  E.g. *Climate Action Handbook* (also from ICLEI)

ICLEI/Local Governments for Sustainability
www.iclei.org
  E.g. *Community Outreach Tool*

EPA Climate Change site
www.epa.gov/climatechange
  Local Governments--actions & resources
RESOURCES

 ENERGY STAR  [www.energystar.gov](http://www.energystar.gov)

- Energy Star® products and retailers
- Purchasing & procurement
- Guidelines for energy management
- Improving building performance
- Power management (PCs)
- New building design: guidance & tools
  - Target Finder
  - Green building policy guidance
- Sections: govt, business, institutions, schools, congregations, etc.
RESOURCES

- 2030 Challenge
  www.architecture2030.org
- NYSERDA www.nyserda.org
- NYPA www.nypa.gov
- USGBC (US Green Building Council)
  www.usgbc.org LEED® rating system
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