

Cambridge, Massachusetts

**TACKLING CLIMATE
PROTECTION AT THE
LOCAL LEVEL**

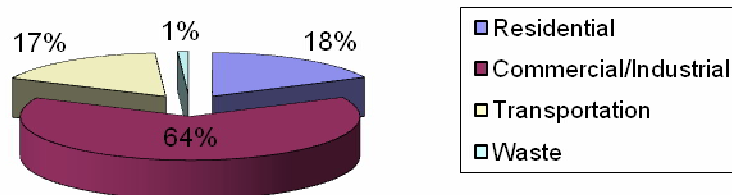
John Bolduc, Environmental Planner
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The Climate Challenge in Cambridge

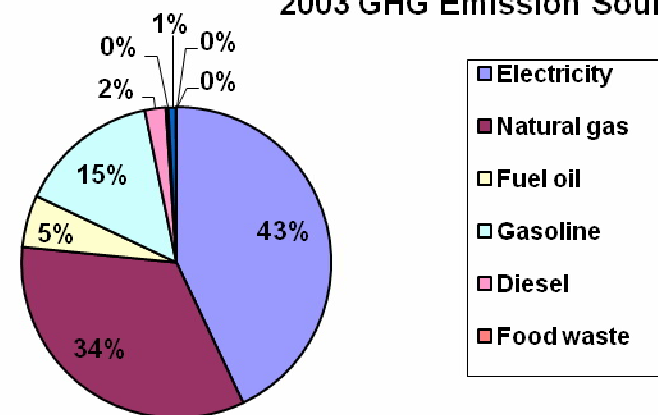
Energy use in buildings is the problem

- Over 80% of GHG emissions are from electricity, natural gas, & fuel oil use in buildings
- About 2/3 of total emissions are related to commercial & institutional buildings
- Nationally, buildings account for 48% of US energy

Cambridge Greenhouse Gas Emissions - 2003



2003 GHG Emission Sources



Cambridge's Strategy

- **Municipal government must lead by example:** *We can't ask people to do things their government is not doing*
- **Engage all sectors of the community:** *It's a huge challenge that will require multiple actions by everyone*
- **Measure GHG emissions and energy use and report to the public:** *Transparency and accountability drive the process*

Benefits to Cambridge

What's in it for the city?

- Resiliency against rising energy costs for businesses and residents
- Improve building stock
- Create jobs
- Reduce environmental impact
- Position City for grants and other resources

Municipal Actions

- Inter-departmental Energy Management Work Group
- Developed Web-based Energy Information System
- Joined EPA Community Energy Challenge
- Benchmarking City buildings with Energy Star Portfolio Manager
- Energy audits and improvement projects
- Cross-departmental Initiatives
 - Energy Star Purchasing Policy
 - Greensense employee energy awareness program
- Follow LEED standards for new construction & major renovations
- Renewable energy goal: 20% by 2010
 - RECs
 - Think Energy study
 - PV installations
 - Small hydro feasibility study

Cambridge Energy Alliance

Goals

- Make energy improvements to 50% of all buildings within 5 to 7 years
- Reduce peak electricity by 50 MW (15% decrease) & fossil fuel use by 10%
- Reduce GHG emissions by 150,000 tons of CO2 annually
- \$100 million of energy improvements

Structure

- Formed non-profit: operationally separate from City, but affiliated
- Pre-qualified 5 ESCOs to serve as primary contractors; CEA provides oversight
- CEA supports ESCOs with marketing
- One stop service for property owners

Financing

- Arrangements with banks for residential financing
- Working with investment bank to provide pooled financing for large projects

The Coming Green Wave

The Early Bird Gets the Worm

- Rising fossil fuel prices
- Federal climate legislation: carbon pricing & markets
- Regional climate initiatives
- Clean energy technology
- Federal Energy Block Grants

Contacts & Resources

- John Bolduc, Environmental Planner, Cambridge Community Development Dept, 617-349-4628, jbolduc@cambridgema.gov
- City of Cambridge Climate Webpage, <http://www.cambridgema.gov/climate>
- Cambridge Green Buildings/Zoning Task Force, <http://www.cambridgema.gov/cdd/cp/zng/grnbldg/index.html>
- Cambridge Energy Alliance, <http://www.CambridgeEnergyAlliance.org>
- NOW on PBS show about CEA: <http://www.pbs.org/now>, see March 28, 2008 show in archives titled *Save Energy, Save Money, Save the Planet*
- 2030 Challenge, <http://www.architecture2030.org>
- ICLEI-Local Governments for Sustainability, <http://www.iclei-usa.org>
- Energy Star Portfolio Manager, <http://www.energystar.gov>
- EPA Community Energy Challenge, <http://www.epa.gov/region01/eco/energy/energy-challenge.html>
- Energy Block Grants, <http://www.usmayors.org/climateprotectin/eebg.htm> & <http://www.climatecommunities.us>