Connecticut Climate Change

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Background

- Governor’s Steering Committee Formed (Commissioner level - Clean Energy Fund, DEP, DPUC, DAS, DOT, OPM)
  - Staff level committee carries out day-to-day planning; meet monthly

Stakeholder process – April 2003 – Jan 2004

- Approximately 30 stakeholders (industry, government, academia, non-profits), workgroups and public meetings
- Report issued: Stakeholder Dialogue: Recommendations to the Governor’s Steering Committee
2005 CT Climate Change Action Plan

• Draft submitted to CGA 1/5/05; public hearing 1/19; final plan due in February.

• Contains 55 recommendations made by Stakeholders, some with more in-depth analysis, meets or exceeds NEG/ECP goals

• Public input
Summary of Recommendations by Sector

• Transportation:
  – Raising emission standards for new cars; reducing black carbon from diesel engines through the use of low sulfur diesel, engine improvements and tailpipe controls; investing in a hydrogen infrastructure and R&D program.

• Residential, Commercial, Industrial:
  – Upgrading building codes and using energy efficient materials and design concepts in the construction of new state buildings and schools (LEED standard); promoting the purchase of environmentally preferable products and services by state agencies; testing biodiesel for heating.
Recommendations

Agriculture, Forestry, Waste:
Adopting actions to increase recycling and source reductions to 40%; encouraging consumers to buy local produce; supporting landfill-gas-to-energy projects.

• Electricity:
  - Increasing the amount of renewable energy supplied to the electricity grid; implementing a program for Connecticut ratepayers to choose to purchase electricity derived from clean energy; state government purchase of clean energy.
Recommendations

Education:
Increasing awareness among the general public, policy-makers, community leaders, and others of climate change issues and solutions; integrating into curricula and outreach programming
Implementation

2 Key Elements:

1. Collaboration
   – CT DEP working with other state agencies and with institutions and non-profits
   – *Different missions…different cultures, but same purpose…Public Service – to serve the people of the State of Connecticut!*
   – Form Partnerships
   – Communication

2. Education
Implementation

• Initial First Steps
  – Governor accepted all 55 Recommendations: 38 “go”; 17 “slow”
  – Executive Order 32 issued
  – Commits state to purchase renewable energy (20% by 2010, 50% by 2050), and reduce energy use by 20%

• Legislation - Public Acts passed in June 2004 session:
  An Act Concerning Climate Change (PA 04-252)
  – Requires mandatory reporting of GHG emissions, creation of a registry, ongoing planning and implementation action plan effort, development of environmentally preferable purchasing for state goods and services
Legislation, cont.

• An Act Concerning Clean Cars  
  – California emissions standards adopted

• An Act Concerning Clean and Alternative Fuel Vehicles  
  – Promotes hybrids through tax incentives

• An Act Concerning Energy Efficiency  
  – Sets efficiency standards for products and appliances
DEP P2 Office Implementation

Rec 54: Public Education & Outreach:

Website created:  www.ctclimatechange.com

– Central hub for all documents, press releases, links to NGOs working on climate issues and cities and towns, news & events
– Used for public comments on draft plan
Welcome to Connecticut's Official Climate Change Website

On behalf of the Connecticut Governor's Steering Committee on Climate Change, we are pleased to inform you that the Connecticut Climate Change Action Plan 2005 (Draft) has been submitted to the CT General Assembly. This draft plan contains 55 action items which will enable the state to achieve its 2010 and 2020 greenhouse gas reduction goals. [Click here to see draft 2005 plan]

Thank you for your participation in Connecticut's climate change initiative.

Special thanks to the Emily Hall Tremaine Foundation for their continued support of Connecticut Climate Change efforts.
Education & Outreach, cont.

- DEP P2 web page with links
- P2 View newsletter articles and event list
- Press releases
Implementation

2. Climate Change Education Committee formed
   – Includes state agencies (DEP, OPM, CEF, CT Transit) NGOs (working on clean energy, environmental, transportation, climate issues) school educators; monthly meetings

   – Assists with education and marketing on all climate change action plan recommendations

   – Provides network and coordination for groups doing outreach related to climate change

   – Develops clearinghouse for CT climate change info, input on development of www.ctclimatechange.com
Climate Change Education Committee, cont.

Collaboration on Messaging - shares polling, messaging, and marketing research

Examples:
1) CT League of Conservation Voters public opinion surveys on global warming and related issues
2) SmartPower/Clean Energy States Alliance market research on clean energy
3) Natural Resources Defense Council presentation on “Talking Global Warming”
Implementation

3. **CT Science Center Collaborative**
   - Goal: integrate climate change science and call to action into programs at CT science centers and museums
   - Project team: Clean Air-Cool Planet, New England Science Center Collaborative, DEP
   - 22 centers interviewed provide opportunities to educate over 3 million people/year
   - CT science centers provide: teacher training, citizen science programs, public displays, classroom programs
CT Science Center Collaborative

- CT science centers need: staff training on climate science and actions, curriculum and programs that meet CT science frameworks, programs, displays, resources, funding

Progress:
- “Meet the scientist events” (3 so far) – climate scientists and researchers present to science centers
- Steering committee formed – to develop strategic plan
- New England Science Center Collaborative exists in all New England states, contact Richard Polonsky 603-444-1110
CT Science Center Collaborative
Implementation, cont.

Rec 29 – Promote Voluntary Programs
DEP actively promotes existing programs and provides assistance

Focus on Municipalities
• ICLEI Cities for Climate Protection – 16 CT towns participating
  – First step is to complete GHG Inventory
  – Then Action Plans
  – Annual meeting to share progress and information
Promote Voluntary Programs, cont.

- Energy Resource Guide for Municipalities
  http://www.dep.state.ct.us/wst/p2/energy/municipal_energy_resource_guide.pdf
  – Includes information on a variety of programs, resources, and contact info

- Partner to support CT Conference of Municipalities in hosting climate/energy events for their members – Nov 2004

- Guilford workshop on Impact on Shoreline Communities
Promote Voluntary Programs, cont.

DEP help to promote 20% by 2010 clean energy campaign

- run by NGOs and focuses on cities and towns, faith communities, colleges, universities, business

- CT’s Clean Energy Communities – towns commit to 20% clean energy, get a certain number of businesses or households to purchase clean power – GET 1 FREE kW clean energy system worth $10,000
Implementation, cont.

Rec 19 & 20: High Performance Schools, State funded buildings, privately funded projects

- CT DEP on CT Green Buildings Council (also OPM, ISE, CEF, others)
- New website is up and running - go to www.ctgbc.org

- High Performance School workshop on 10/5/04

- "advanced" high performance school workshop on 4/14/05, at Rensselaer at Hartford.
High Performance Buildings, cont.

Examples of state projects:

Public buildings:
• LEED registered buildings completed - Dormitories at Eastern, Western, and Southern CT State University campuses.

• June 2005 - Western CT State University Science Lab and Classroom building

• Under construction - Science lab building at ECSU
High Performance Buildings, cont.

Examples of state projects:

Private buildings:

- Mark Twain Museum Visitor Center - completed Spring 2004

- Pfizer Research Center and Lab - completed January 30, 2005

- Bristol Myers Squibb warehouse center - under construction

- Hotchkiss School new Music Wing - completed Spring 2005
Implementation, cont.

Rec 24 - Energy Benchmarking & Tracking

- Energy Efficiency / Benchmarking Workshops
  - being held at different locations throughout the state to provide peer mentoring and technical assistance using Portfolio Manager.

  - OPM, ISE provides technical assistance.

  - First workshop held using student interns to collect and input data on (1) municipal buildings in certain communities (Stamford, Derby, Windham, Hartford)
Implementation
Rec 23 – Green Campus Initiative

New England Board of Higher Education
• In August 2003, the NEBHE and the New England Governors’ Conference sent a letter to the presidents of all New England colleges & universities.

• Presidents asked to sign a voluntary pledge to support the goals of the NEG/ECP Climate Change Action Plan.

• 19 CT colleges have signed, 85 Colleges & Universities in New England have signed the pledge (as of April 2004).

• 3 CT colleges joined CA-CP Campuses for Climate Action programs
NEBHE Pledges in CT

• 19 Institutions in CT have signed (as of April 2004)

– Central Connecticut State University
– Charter Oak State College
– Connecticut College
– Eastern Connecticut State University
– Fairfield University
– Gateway Community College
– Goodwin College
– Lyme Academy College of Fine Arts
– Naugatuck Valley Community College
– Northwestern Connecticut Community College
– Saint Joseph College
– Southern Connecticut State University
– St. Vincent’s College
– Trinity College
– University of Bridgeport
– University of Connecticut
– University of New Haven
– Western Connecticut State University
– Yale University
Campuses for Climate Action Workshop

• First meeting held in New Haven, CT on March 28, 2003; quarterly meetings.

• Workshop recognized by EPA for being the first statewide meeting of its kind.

• Materials are available on Clean Air - Cool Planet website:
Green Campus List serve

- A CT-Green-Campus-Exchange listserv was established in June 2003 to facilitate communication between Connecticut campuses.
- Join by sending an e-mail to CT-Green-Campus-Exchange@yahoogroups.com or by signing up at http://groups.yahoo.com/group/CT-Green-Campus-Exchange
Implementation

RA 25 – Pilot Fuel Switching

• DEP Supplemental Environmental Project funding for pilot at ECSU to test B20 blend in heating
  – Before and After testing:
    Emissions testing (SO2, Nox, CO2, O2, PAH)
    Boiler efficiency and maintenance
    Fuel use and costs
Implementation

RA 27 – State Procurement of Environmentally Preferable Services and Products

- Working with DAS

- Climate Change Showcase at CT Shops Expo – Nov 2004
  - Displays, slide show, sample products, contract info

- Hybrids in state fleet, and fleet average mpg

- Energy Star products
Implementation

Other DEP efforts:

• Air Bureau:
  – Cal LEV II legislation & regulations - Rec 1
  – Clean diesel (school buses, construction) – Rec 9
  – Low sulfur home heating oil proposed legislation  - Rec 9

• Promote Bike to Work & DEP carpooling - Rec 7 Smart Growth

• Renewable Energy Projects:
  – Fuel Cell at Dinosaur State Park  - Rec 6
Evaluating Results

- Monthly state agency Climate Change Coordinating Committee (C4) meetings
- GSC meetings
- Progress tracked on website for each recommended action
- PA 04-252 requires DEP and GSC to submit annual progress report to legislative committees
- Continue public input, comments via website
- Distribution of final plan, presentations
CT Leadership – Looking Ahead

- February 15, 2005 - GSC to submit final *CT Climate Change Action Plan 2005* to legislative committees
- December 2005 (and annually) – DEP and GSC to submit annual progress report to legislative committees
- April 2006 (and annually) – CT Title V sources to submit greenhouse gas emissions reports to regional registry
- July 2006 – voluntary reporting on greenhouse gas emissions from other sources to regional registry
- July 2006 – (and triennially) – DEP publish greenhouse gas emissions inventory
- January 2007 – work with region to develop date for long-term goals
- January 2008 – GSC amend climate change action plan to reach long-term goals
ADDITIONAL DETAILS

List of all 55 Recommendations by Sector
Recommendations

Transportation Policy

- LEV II Standards
- Greenhouse gas (GHG) feebate program
- Fleet vehicle incentives and initiatives
- Tailpipe GHG standards
- Public education initiative
- Hydrogen infrastructure research and demonstration program
- Transit, smart growth, and vehicle miles traveled (VMT) reduction package
- Multistate intermodal freight initiative
- Clean diesel and black carbon
Recommendations

Residential, Commercial, Industrial Policy

- Appliance standards
- Appliance-swapping program
- Electric hot water heater replacement program
- Bulk purchasing of appliances
- Upgrade residential and commercial building energy codes
- Promote energy efficient and energy improvement mortgages
- Energy Conservation Loan Program
- Weatherization Assistance program
- Energy Star Homes program
- High-performance buildings: schools and other State-funded buildings
- High-performance buildings: privately funded projects
- Shared savings program for government agencies
- Training of building operators
- Green campus initiative
Recommendations

Residential, Commercial, Industrial Policy (continued)

- Energy benchmarking, measurement, and tracking program for municipal buildings
- Pilot fuel-switching projects
- Remove barriers to third-party load-management techniques
- State procurement of environmentally preferable services and products
- Review of New England Regional Demand Response Initiative (NEDRI) recommendations
- Promote voluntary programs and actions
- Encourage clean combined heat and power
- Restore conservation and load management fund
- Create Heating oil conservation fund
- Create Natural gas conservation fund
- Identify measures to reduce high-global warming-potential gases
Recommendations

Agriculture, Forestry, Waste Policy

• Install centralized manure digesters
• Reduce nonfarm fertilizer use
• Buy local produce
• Forest management and forest carbon offsets
• Urban tree planting program
• Forest and agricultural land preservation
• Promote use of durable wood products over other construction materials
• Support economically viable landfill gas-to-energy projects
• Increase recycling, source reduction to 40 percent
• Voluntary carbon offset program
Recommendations

Electricity Generation Policy

- Renewable energy strategy (RES)
- Renewable portfolio standard (RPS)
- Government green power purchase
- Production tax credit
- Clean energy choice
- Renewable Energy Certificates
- Restore Clean Energy Fund
- Energy efficiency and combined heat and power
- Regional cap-and-trade program
Recommendations

Other Recommendations

- Public Education & Outreach
- Emissions inventory and reporting