



Connecticut Climate Change

CHAPTER 2

DIALOGUE AND POLICY RECOMMENDATION PROCESS

Purpose and Goal: Progress Toward or Beyond NEG/ECP Targets

In response to the NEG/ECP Climate Agreement of 2001, the Governor's Steering Committee (GSC) created the Connecticut Climate Change Stakeholder Dialogue (CCSD) to provide stakeholder input to the State's anticipated development of a greenhouse gas (GHG) action plan.

The NEG/ECP agreement calls for individual state and provincial commitments to meet regional targets in addition to taking action on specific regional policy issues. The agreement sets regional GHG targets at 1990 levels by 2010 and 10 percent below 1990 levels by 2020, to be shared by jurisdictions in the transboundary region. It also establishes a long-term target of 75 to 85 percent reductions, consistent with scientific assessments of mitigation needs. NEG/ECP targets were established by top-down assessments of scientific need, not through bottom-up feasibility assessments of actions or policies. The targets will be updated periodically on the basis of scientific developments. The agreement covers six GHGs, including CO₂, N₂O, CH₄, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). It does not cover black carbon; however, Connecticut stakeholders recommended baselines and actions that could include this pollutant in State recommendations.

The GSC asked Connecticut stakeholders to recommend a list of individual climate change mitigation actions that the State could take to make progress toward or beyond NEG/ECP targets. Individual recommendations would be provided on a nonbinding basis to the GSC for consideration; subsequently, the GSC would make recommendations to the Governor. To the extent possible (based on data availability and time), and with the assistance of technical working groups and the Center for Clean Air Policy (CCAP), stakeholders were asked to assess the benefits of actions (GHG reduction potential); their cost-effectiveness (cost per metric ton of GHG removed); and other ancillary costs, benefits, and feasibility issues as appropriate per measure. Assessments were to be conducted on a case-by-case basis using data, methods, and assumptions agreed to by the working groups and stakeholders. Actions with quantifiable reductions would be counted in aggregate toward the NEG/ECP target, and nonquantifiable measures could be included without scoring toward the NEG/ECP target.

The GSC asked CCAP to provide impartial and expert facilitation of the CCSD process and to submit a final report that included recommendations, results of assessments, and stakeholder and public views. The GSC asked CCAP to seek, but not mandate, consensus among stakeholders. CCAP ensured that the dialogue process was implemented according to plan.

Ground Rules

CCAP proposed a set of ground rules for the GSC's and stakeholders' review and input; the final decision was made by the GSC. CCAP based the ground rules on the goals and objectives set initially by the GSC for a process that would have the following characteristics:

- **Informal:** The GSC preferred an informal advisory process that would enhance the flexibility, timeliness, and effectiveness of the dialogue, and produce a broad and aggressive set of recommendations. The dialogue was conducted as an informal advisory discussion.
- **Nonbinding:** The GSC requested a list of policy choices for further consideration, but it did not commit to adopting those measures. Instead, it reserved the right to make its own recommendations to the Governor on the basis of stakeholder and public input and any other information it desired.
- **Inclusive:** Meaningful stakeholder and public input and participation was desired to the extent possible. Although CCAP's initial proposal did not include public participation, the process was restructured to provide public review and input at a number of stages to maximize inclusion of interested parties in all decisions (see discussion of public input mechanisms). As a practical matter, the size of the stakeholder group was limited to facilitate discussion, but technical working group membership was opened to the public and public input meetings were held the night of or the day after stakeholder meetings (see discussion on the roles of stakeholders, technical working groups, and the public).
- **Transparent:** The results of stakeholder decisions, as well as participant views, were to be made public and easily available. The final report, however, would not provide attribution of the views of individual organizations to encourage candor during discussions. All assessments and opinions of stakeholders, technical working groups, and the public were posted on the CCAP website during the dialogue process. The State and CCAP announced stakeholder and working group meetings in advance through CCAP's website, which provided call-in numbers for working group conference calls. The website also featured meeting agendas, presentations, and summaries for public review in advance of and following meetings (See discussion of public input mechanisms).
- **Participatory:** The GSC preferred policy recommendations that were the product of a high level of direct involvement by stakeholders and working groups, instead of a process more dependent on and driven by outside consultants. As a result, CCAP structured a process that was directly based on stakeholder proposals and data. CCAP did not make policy proposals or independent decisions on data sources, methods, or assumptions. The GSC and stakeholders asked CCAP to provide data from other state and regional planning processes to help the stakeholders and working groups formulate actions and assessments. This information included a list of actions considered in other state planning efforts as well as publicly available data on specific measures from those efforts (See later discussion on the decision process).
- **Flexible:** The GSC wanted the ability to adjust the parameters of the process in response to stakeholder feedback and new information. As a result, CCAP provided process review and check-ins with participants at the outset of stakeholder meetings and some technical working group meetings, and it adjusted the process as needed. Stakeholders were provided

opportunities to review and discuss the decision process, the calendar, and ground rules, for example.

- **Timely:** The GSC requested delivery of a final report in advance of the 2004 legislative session to allow sufficient time to review the report, formulate recommendations to the Governor, and understand its legislative and administrative implications. The final report was delayed from an initial due date of October 31, 2003, to December 31, 2003, to accommodate advanced modeling for the electricity sector, but no further extensions were provided. Many participants in the dialogue noted the ambitious timing of the process and the level of intensity it implied to meet the final deadline.
- **Collegial:** The GSC requested a good-faith process that allowed organizations to set aside existing positions and personal views to collaborate effectively as a group. In response, CCAP structured discussions to be objective (technical and data driven), inclusive, and with shared goals; this was done to provide stakeholders with a safe and substantive environment for addressing sensitive issues. In its role as a stakeholder, the State abided by these same principles (see discussion of roles).
- **Data driven:** The GSC wanted an objective dialogue and specific, implementable recommendations rather than a rhetorical discussion. CCAP proposed, and the GSC agreed, to a dialogue process that was technical in nature and based on expert, objective, and transparent data related to clear assessment criteria (see Appendix 1).
- **Consensus driven:** At the request of the GSC, CCAP developed a process that sought but did not mandate consensus. This approach allowed for the creation of a broad and aggressive set of actions and the inclusion of a broad distribution of stakeholder views in the final report. The GSC requested a process that was nonbinding and advisory to provide the stakeholders and the State with the flexibility to explore options and alternative policy designs that were not supported by an existing consensus.
- **Openly voted:** CCAP proposed a set of voting procedures to stakeholders at the first meeting and adjusted them to address the group's interests. The options included four categories of votes (unanimous consent, supermajority, majority, and minority) and an interactive process that explored alternative policy designs as a part of seeking final consensus (See later discussion of voting).

Roles and Responsibilities of the Parties

The CCSD involved participation of a number of parties, including the State (the GSC), the facilitator (CCAP), stakeholders, five technical working groups, and the public. Roles and responsibilities are described below.

State (Roles: Convening, Advisory)

The State of Connecticut acted in two separate roles during the process: first as the convening authority of the process (and recipient of its results), and second as a stakeholder. The GSC was responsible for the following activities as a convening authority:

- Establish a budget and timeline, including funding of the process and technical support as needed (including advanced modeling).
- Select a facilitator (CCAP).

- Create an oversight group (the GSC) and project coordinator (Connecticut Clean Energy Fund).
- Establish purpose, goals, and project calendar.
- Establish roles and responsibilities of parties with advice from the facilitator.
- Select stakeholders.
- Provide meeting facilities and staff technical support.
- Receive and distribute a final report.
- Establish a process for next steps.
- Provide recommendations to the Governor.

The GSC included the following State officials:

- Arthur H. Diedrick (Chair): Chairman of the Connecticut Clean Energy Fund
- Donald W. Downes: Chairman of the Department of Public Utility Control
- Arthur J. Rocque, Jr.: Commissioner of the Department of Environmental Protection
- Barbara Waters: Commissioner of the Department of Administrative Services
- James F. Byrnes: Commissioner of the Department of Transportation
- John A. Mengacci: Undersecretary of the Office of Policy and Management.

The GSC and State agency staff also acted as stakeholders during the process. Their responsibilities were identical to those of other stakeholders (listed below), including the right to propose and critique policy and to abstain from voting when potential conflicts of interest might exist. In this capacity, the State acted as part of the stakeholder advisory group that provided recommendations to the GSC. The Connecticut agency staff who served as stakeholder representatives or provided technical support to the State were known as the Connecticut Climate Change Coordinating (C4) group. This group included the following participants:

- Bryan Garcia (Co-coordinator): Connecticut Clean Energy Fund
- Chris James (Co-coordinator): Department of Environmental Protection
- Emily Smith: Connecticut Innovations, Inc.
- Connie Mendolia: Department of Environmental Protection
- Chris Nelson: Department of Environmental Protection
- Lynn Stoddard: Department of Environmental Protection
- John Ruckes: Office of Policy and Management
- Barbara Moser: Department of Administrative Services
- Rob Luysterborghs: Department of Public Utility Control
- Michael Chowanec: Department of Public Utility Control
- David Goldberg: Department of Public Utility Control
- Michael Sanders: Department of Transportation
- Lisa Rivers: Department of Transportation

- David Lepri: Department of Revenue Services.

CCAP (Roles: Facilitation, Advisory)

The GSC asked CCAP to provide the following assistance to the dialogue process:

- Advise the GSC on the dialogue process and technical issues
- Facilitate stakeholder, working group, and public meetings
- Establish meeting agendas and calendars
- CCAP was not under contract to provide technical analysis or policy design, but the GSC did ask CCAP to assist stakeholders and working groups with the following tasks:
 - ◆ Providing initial baselines for review by stakeholders and further refinement by working groups and stakeholders
 - ◆ Providing a list of potential options from other state processes along with associated policy designs and existing technical data from those measures
 - ◆ Drafting policy proposals identified by stakeholders and working groups on their behalf along with results of assessments for stakeholder, working group, and public review
 - ◆ Providing alternative policy design options based on actions considered by other states, when requested by stakeholders and technical working groups
 - ◆ Providing a list and comparative description of analytical tools for working groups and stakeholders, including advanced models and consultants for electricity sector modeling.
 - ◆ Providing a final report to the GSC on October 31, 2003, later extended to December 31, 2003. The GSC requested that final recommendations in the report be available for public review and comment prior to submission.
 - ◆ The facilitation and technical support team included the following CCAP staff:
 - Tom Peterson: Project Director, Stakeholder Group Facilitator and Electricity Working Group Facilitator
 - Karen Lawson: Residential, Commercial, and Industrial Working Group Facilitator
 - Jake Schmidt: Agriculture, Forestry, and Waste Working Group Facilitator
 - Steve Winkelman: Transportation Working Group Facilitator
 - Greg Dierkers: Transportation Working Group support
 - Jia Li, Matt Ogonowski: Electricity Working Group support
 - Mac Wubben: Project coordination and technical support
 - Tony Tubiolo: Web management and technical support

Stakeholders (Role: Decisional)

Stakeholders had the sole and final decisional authority in making policy recommendations to the GSC with CCAP facilitation (by Tom Peterson). This included the following responsibilities:

- Attendance at all stakeholder and working group meetings, either directly or through an alternate. In practice, a majority of stakeholders were present at each meeting. The State chose not to deactivate stakeholders on the basis of poor attendance, but a small number did withdraw from the process voluntarily. A majority of stakeholders were present for all votes.

- Provide input on process-related issues to CCAP
- Provide guidance to, and receive recommendations from, technical working groups in making policy recommendations
- Participate as members of at least one technical working group
- Receive guidance from the public in making policy recommendations
- Review and finalize baselines for sectors, including approval of data methods, sources, and assumptions suggested by working groups
- Propose policy actions for further analysis by working groups and further consideration by stakeholders.
- Help working groups and CCAP draft policy actions and designs, including alternative designs where further consensus building was needed
- Establish priorities for technical analysis by working groups
- Provide technical data to technical working groups and CCAP for analysis of potential recommendations
- Review and approve working groups' analysis of potential recommendations, including data methods, sources, and assumptions, and including the selection of an advanced model for electricity sector modeling
- Approve final recommendations with CCAP facilitation
- Stakeholder recommendations and views are included in the discussion of individual recommendations later in this report
- Stakeholders included the following organizations:

City of New Haven	Institute for Sustainable Energy at Eastern
Connecticut Global Fuel Cell Center at the	Connecticut State University
University of Connecticut	International Brotherhood of Electrical
Connecticut Business and Industry	Workers
Association	Mohegan Tribal Nation
Connecticut Clean Energy Fund	Motor Transport Association of
Connecticut Fund for the Environment	Connecticut
Connecticut League of Conservation	The Nature Conservancy.
Voters	Northeast Utilities
Connecticut Resource Recovery Authority	Office of Policy and Management
Department of Administrative Services	Pitney Bowes
Department of Environmental Protection	Public Service Enterprise Group
Department of Public Utility Control	School of Forestry and Environmental
Department of Transportation	Studies at Yale
Environment Northeast	SmartPower
Fleet Bank	United Technologies

Working Groups (Roles: Advisory and Technical Support)

Working groups were formed at the first stakeholder meeting and facilitated by CCAP. They were charged with the following advisory and support responsibilities:

- Attendance at all working group meetings, either directly or through an alternate. In practice, a majority were present at all meetings.
- Advising stakeholders on baseline methods, data sources, and assumptions needed to finalize baselines (CCAP provided initial baselines to stakeholders that were referred with stakeholder guidance to working groups for further action)
- Advising stakeholders on potential mitigation options and implications (i.e., benefits, costs, ancillary, and feasibility issues)
- Providing suggested policy designs and analytical recommendations for assessments of each action
- Suggesting alternative policy designs and approaches needed to meet NEG/ECP targets or achieve broad consensus, as needed by stakeholders, with associated data methods, sources, and assumptions
- Assisting with drafting of policy proposals, interim and final analysis of individual measures, and final baselines.

Working groups were organized by sectors as follows: electricity supply, residential/commercial/industrial (RCI), transportation and land use, agriculture/forestry/waste (AFW), and education. A list of working group participants is included in Appendix 2. Working group comments are summarized in the discussions of individual policy recommendations (Chapter 3).

Public (Role: Advisory)

Meaningful opportunities for public review and input were provided through the following methods:

- Participating in technical working group discussions
- Participating in public review and input meetings and providing suggestions to CCAP via e-mail or letter
- Advising stakeholders on potential options and implications
- Providing relevant data for working groups to use when considering potential policy options
- Reviewing the progress of stakeholders and suggesting alternative policy designs and approaches needed to meet NEG/ECP targets or achieve a broad consensus

A list of public meetings is included in the project calendar (see below and Appendix 4). Public comments are summarized in the report under the discussion of individual recommendations, and a compendium of all public comments was submitted to the State with the final report.

Organizations that participated in technical working groups or public meetings included the following entities:

Alliance of Automobile Manufacturers	Central Connecticut Regional Planning
American Automobile Association	Agency
APX	Clean Energy Group
Archdiocese of Hartford	Clean Water Action
Argonne National Laboratory	Community Energy
Capital Region Council of Governments	Connecticut Climate Coalition
Center for Ecological Technology	

Connecticut Earth Science Teacher's Association	New Haven Environmental Justice Network
Connecticut Food Policy Council	Northeast Organic Farming Association
Department of Revenue Services	NRG Energy
Dominion Power	Nuclear Energy Institute
Don't Waste Connecticut	Nuclear Information and Resource Service
EMCON/OWT, Inc.	NXEGEN
Enabling Technologies, LLC	Office of the Connecticut State Treasurer
Environmental Architecture, LLC	Phelps Dodge Corporation
Environmental Defense	Praxair
FANNIE MAE	Proton Energy Systems
Farmington River Watershed Association	Pure Power
Fuel Cell Energy	Quinnipiac River Association
GE Global Research Center	Reforest the Tropics
Hydrogen Source	Rep. Mary Mushinsky (85th District)
Independent Connecticut Petroleum Association (ICPA)	Robinson & Cole
Interreligious Ecojustice Network	Sierra Club Connecticut Chapter
ISO New England	Sterling Planet
Merit Engineering	The Retec Group
Middlesex Clean Air Association	Toxics Action Center
MJ Bradley and Associates	UK Carbon Trust
National Renewable Energy Laboratory	University of New Hampshire
Natural Resources Defense Council	Waste Management
	Wesleyan University
	Ztek Corporation

Calendar

Major Project Milestones

- Request for proposals (RFP) for facilitation services for Connecticut's CCSD
 - ◆ November 13, 2002: RFP issued
 - ◆ December 11, 2002: RFP deadline for submission
 - ◆ December 17, 2002: Interviews with RFP finalists
 - ◆ December 23, 2002: Determination of contract award to CCAP.
- February 5, 2003: Connecticut Innovations, Inc., on behalf of the Connecticut Clean Energy Fund, executes a contract with the CCAP to facilitate Connecticut's CCSD
- October 10, 2003: Facilitation contract extension granted pursuant to the request of the GSC
- October 31, 2003: Initial deadline for stakeholder recommendations to the GSC
- December 31, 2003: Final deadline for stakeholder recommendations to the GSC.

GCS Meetings

1. November 6, 2002
2. February 5, 2003: meeting between CCAP and the GSC

3. June 24, 2003
4. September 15, 2003
5. November 17, 2003
6. January 6, 2004: final presentation by CCAP to the GCS.

Stakeholder Meetings

1. April 23, 2003 (process kick-off, review of initial inventory and baselines, long list of policy options)
2. June 9–10, 2003 (review of revised inventory, baselines and options list; establishment of priorities for analysis)
3. August 18, 2003 (review of final inventory, updated baselines, first draft assessments of options and scenarios)
4. October 1 (special stakeholder meeting to approve electricity baseline assumptions for the Integrated Planning Model [IPM])
5. October 15–16, 2003 (identification of consensus actions, review of cross-cutting issues)
6. December 4–5, 2003 (resolution of pending actions, cross-cutting issues).

Working Group Meetings

Electricity Working Group

- | | |
|-----------------------|------------------------|
| 1. May 21, 2003 | 9. September 18, 2003 |
| 2. June 5, 2003 | 10. September 24, 2003 |
| 3. June 18, 2003 | 11. October 8, 2003 |
| 4. July 9, 2003 | 12. November 17, 2003 |
| 5. July 23, 2003 | 13. November 19, 2003 |
| 6. July 30, 2003 | 14. November 26, 2003 |
| 7. August 13, 2003 | 15. December 3, 2003 |
| 8. September 10, 2003 | |

Agriculture, Forestry, and Waste Working Group

- | | |
|--------------------|-----------------------|
| 1. May 28, 2003 | 7. September 2, 2003 |
| 2. June 5, 2003 | 8. September 12, 2003 |
| 3. July 2, 2003 | 9. October 7, 2003 |
| 4. July 15, 2003 | 10. November 4, 2003 |
| 5. July 31, 2003 | 11. November 18, 2003 |
| 6. August 12, 2003 | |

Transportation Working Group

- | | |
|-----------------|------------------|
| 1. May 13, 2003 | 4. June 25, 2003 |
| 2. May 21, 2003 | 5. July 9, 2003 |
| 3. June 4, 2003 | 6. July 18, 2003 |

7. July 30, 2003
8. August 6, 2003
9. August 27, 2003
10. October 1, 2003
11. October 9, 2003
12. October 22, 2003
13. October 30, 2003
14. November 6, 2003
15. November 19, 2003

Residential, Commercial, and Industrial Working Group

1. May 22, 2003
2. June 3, 2003
3. June 26, 2003
4. July 3, 2003
5. July 10, 2003
6. July 17, 2003
7. July 24, 2003
8. August 7, 2003
9. August 28, 2003
10. September 11, 2003
11. September 17, 2003
12. September 25, 2003
13. October 2, 2003
14. October 23, 2003
15. November 6, 2003
16. November 20, 2003

Education Working Group

1. September 4, 2003
2. September 16, 2003
3. September 23, 2003
4. October 7, 2003
5. October 21, 2003
6. November 4, 2003
7. November 12, 2003
8. November 18, 2003
9. November 25, 2003

Public Meetings

1. June 10, 2003
2. August 18, 2003
3. October 15, 2003
4. December 4, 2003

Decision Process for Recommendations

Stakeholders and working groups engaged in an open, intensive, and stepwise process to develop final baselines and policy recommendations. CCAP designed the process in consultation with stakeholders, working groups, and the GSC. It included the steps described below.

1. Approval of Process by State, With Input From Stakeholders

At the first stakeholder meeting, CCAP provided a proposed project calendar, ground rules, decision criteria, assessment process (for baselines and actions), and voting methods for stakeholder review. On the basis of this input and with GSC approval, CCAP made adjustments to the process before the next stakeholder meeting. At the second stakeholder meeting, these decisions were reviewed and discussed. CCAP and the GSC finalized the process after the second stakeholder meeting, although continuous adjustments were made during the process.

2. *Creation of Working Groups*

At the first stakeholder meeting, technical working groups were formed, and stakeholders were invited to choose to participate in one or more groups. Working groups followed the same sectoral breakdowns used for inventory and baseline assessments, including:

- Transportation and land use (facilitated by Steve Winkelman, CCAP)
- Electricity supply (facilitated by Tom Peterson, CCAP)
- Residential, commercial, and industrial, including distributed generation and combined heat and power (facilitated by Karen Lawson, CCAP)
- Agriculture, forestry, and waste management (facilitated by Jake Schmidt, CCAP).

At the time of working group formation, CCAP noted that cross-cutting issues could emerge from sector-based discussions during the process. Education, technology, cap-and-trade, and reporting and registry issues were identified as potential issues that would need working group support later in the dialogue process. Ultimately, a working group was formed to generate education recommendations. Technology issues were addressed within working groups, particularly hydrogen issues related to transportation and distributed generation. The electricity working group addressed cap-and-trade issues. Reporting and registry issues were not addressed by a working group; instead, stakeholders partially addressed those issues at the final meeting.

Working groups initially met twice between stakeholder meetings. A number of stakeholders and working group members requested more frequent and regular meetings; in response, CCAP structured regular, weekly (or biweekly) conference calls and/or meetings to allow working groups more intensive participation. This request was based on the challenge of designing and analyzing a large number of potential actions.

3. *Creation of Public Input Mechanisms*

Following the first stakeholder meeting and at the request of the GSC, CCAP recommended a variety of public participation mechanisms. Results of public input were to be treated with the same standing as working group recommendations for stakeholder review and consideration. Public participation in the dialogue occurred through the following methods:

- **Public meetings:** Meetings were held the night of or day after stakeholder meetings. At each meeting, CCAP's Tom Peterson presented the same materials to the public that had been presented previously to stakeholders. He also provided updates on stakeholder decisions. The public was invited to make additional recommendations or comments at that time. The comments were relayed to stakeholders during their meetings and by written summary to stakeholders and working groups after each public meeting. Meetings lasted three hours.
- **Working group participation:** The State and CCAP announced working group meetings in advance and provided call-in numbers or meeting locations. No limits were placed on public attendance or participation. In practice, a relatively small and regular set of interested parties joined working groups. Comments by the public at those meetings were treated the same as those by working group members. Results of each meeting were summarized and posted to the CCAP website in advance of the next meeting.

- **Continuous website postings and e-mail input:** CCAP maintained a current and comprehensive website with a link for public input (to Mac Wubben, CCAP). Incoming e-mails were distributed to the working groups and their leaders for consideration if they addressed specific working group issues.
- **Review and comment on final recommendations:** Following each stakeholder meeting, the results of stakeholder decisions to narrow or redefine the potential list of policy options were summarized and posted to the website for public review and input. At public meetings, CCAP encouraged public input and recommendations on the same time schedule as stakeholders to ensure its usefulness. At the second-to-last stakeholder meeting, stakeholders identified recommendations that had unanimous support. Those 28 recommendations were summarized and posted for public comment prior to the final stakeholder meeting. At the final stakeholder meeting, stakeholders resolved the outstanding list of 27 potential policy recommendations. After the meeting on December 5, 2003, CCAP summarized results of the final votes in a series of documents that were posted on the CCAP website the following week for a full week of public comment. Those documents were as follows:
 - ◆ A list of the names of all 55 measures
 - ◆ A summary table of the 55 recommendations with
 - the name of the action;
 - its lay description;
 - its voting status (all but three were unanimous consent, and the remaining three fell one vote short and were categorized as supermajority);
 - summary results of assessments of costs, benefits, and other major issues;
 - stakeholder views; and
 - a summary of public views registered to date for each action.
 - ◆ Summary graphs of progress by each working groups, individually and combined, toward the NEG/ECP targets
 - ◆ Drafts of report subchapters for each working group, including a summary of baselines and progress graphs; a table of actions and results of benefit and cost assessments; a description of the recommended action; results of assessments of benefits, costs, ancillary and feasibility issues; stakeholder views; and a summary of public views registered to date.

Following the end of the public comment period (December 16, 2003), CCAP incorporated summaries of public comments into the report subchapters for each recommendation and included a compendium of all public comments for the State in the final report. Stakeholder comments received during this period were used to determine whether draft language by CCAP needed technical clarification, but no new stakeholder views were added to the report following the last stakeholder meeting. The final report was submitted to the GSC on December 31, 2003 and posted to state's website (<http://www.ctclimatechange.com/>) with a notice to stakeholders and working groups. The report was posted to the CCAP website (www.ccap.org/) on January 5, 2004 (due to closure of the CCAP office through the first week of January). The final report, meeting summaries, and associated working group and stakeholder meeting documents can be found on the CCAP website.

4. Review of GHG Inventory and Initial Baselines

Northeastern States for Coordinated Air Use Management (NESCAUM) produced the Connecticut GHG inventory under contract with Connecticut Innovations and on behalf of the Connecticut Clean Energy Fund. Results of the initial inventory were presented at the first stakeholder meeting. A refined version was presented at the second stakeholder meeting; stakeholders to move forward with planning based on those results, which included a clear estimate of 1990 GHG emissions for Connecticut. A final version of the inventory (using the same 1990 index) was provided at the third stakeholder meeting (see the discussion of the history of Connecticut GHG actions and inventory in Chapter 1). CCAP coordinated with NESCAUM and Connecticut DEP on the finalization of the inventory to maintain consistent approaches to the development of initial baselines. NESCAUM presented these at the first and second stakeholder meetings for review and comment by stakeholders.

At the first stakeholder meeting, CCAP provided initial baselines for all sectors and explained analytical methods, data sources, and key assumptions for each sector. CCAP also compared the data to 1990 GHG levels in Connecticut and provided initial estimates of the size of NEG/ECP targets as applied to the State. At this point, CCAP also noted the potential need for advanced modeling to develop electricity baselines (and mitigation analysis) and to address power import and export issues as well as interactions between policy approaches (energy efficiency, renewable energy, caps and standards).

Stakeholders provided general guidance to working groups on baseline development needs, and they referred further refinements to working groups. A refined set of baselines was presented to stakeholders at the next meeting for further review and referred back to working groups for finalization.

For the electricity sector, stakeholders requested that CCAP provide a list of advanced models to use in baseline and mitigation assessments. This task included a comparative analysis of model functions and uses (see CCAP modeling table, Appendix 3). The stakeholders asked CCAP in June to provide a list of potential model vendors for dispatch modeling in the electricity sector. CCAP identified two primary providers: Synapse Consulting and the PROSYM model, and ICF Consulting and the Integrated Planning Model (IPM). CCAP facilitated a series of working group reviews of these models and vendors and asked the stakeholder group to vote on its choice.

In early August, the electricity working group unanimously approved the use of the IPM. Connecticut DEP committed to funding this additional modeling through a \$75,000 purchase order that was approved in early September. The delay in approval and funding of the model resulted in GSC's extension of the final report's deadline to December 31, 2003. As a result of the delay in modeling, the electricity sector also adopted a later schedule for policy scenario development.

A special stakeholder meeting was called on October 1, 2003, to ask for stakeholder approval of key baseline assumptions for electricity modeling, including the likelihood of nuclear relicensing, natural gas price forecasts, the likelihood of federal utility legislation, cost and performance of renewable energy policies, and the inclusion of a demand response function (see

the discussion in the electricity recommendations subchapter). Stakeholders approved assumptions for all of these issues by unanimous consent, with the exception of nuclear relicensing, which was decided by majority. Further work on electricity was referred to the electricity working group.

A draft version of the final electricity baseline was presented at the second-to-last stakeholder meeting for review and comment. Final baselines were presented at the final stakeholder meeting and incorporated by CCAP into estimates of progress toward NEG/ECP targets.

5. Development of Potential Mitigation Options (“Long List”)

The GSC asked CCAP to help stakeholders identify potential policy options by providing them with a list of GHG actions considered by other state, local, and regional entities (see Appendix 5 for this list). This list was presented at the first stakeholder meeting. CCAP reviewed the list and the definitions of actions with stakeholders and asked for improvements to the framework of actions to ensure its comprehensiveness. Stakeholders were also asked to add potential actions that were missing and potentially applicable to Connecticut. This updated “long list” of potential policy actions was forwarded to the working groups for further consideration of analysis priorities. CCAP was asked to provide simple high, medium, and low rankings of the GHG action potential for the working groups.

6. Development of Initial Priorities for Analysis

At the first working group meetings, participants were asked to review the long list of policy options developed by CCAP along with the GHG rankings. Working groups were asked to suggest additional actions or categories for the list, refine individual actions for stakeholder consideration, and identify potential priorities for initial analysis of benefits and costs. At the second stakeholder meeting, stakeholders reviewed the list again and made additions based on working group input. They also identified initial priority actions for analysis by the working groups. Working groups received the results of these discussions and began the initial assessment process for individual measures.

7. Identification of Preferred Policy Designs for Potential Actions

During the initial phase of analysis of actions, working groups identified key policy design parameters for each action (e.g., levels, timing, and implementation approach). At their third meeting, the results of initial assessments (of benefits and costs) and initial policy design recommendations were provided to stakeholders for review and advice for working groups.

8. Quantification of Benefits (GHG Reduction Potential), Costs (Cost per MMTCO_{2e} removed), Ancillary Costs and Benefits, and Feasibility Issues

Stakeholders and working groups were responsible for proposals and analysis of individual actions. CCAP assisted working groups with assessments by identifying potential tools and methods for analysis, when needed, as well as potential data sources and analytical parameters. Working groups were responsible for finalizing decisions on analytical approaches and providing policy designs and data. CCAP asked working groups to make the methods, sources, and

assumptions transparent when providing data. CCAP recorded these variables in the summaries of action assessments. Stakeholders reviewed assessment results on an ongoing basis as they participated in weekly working group conference calls. Assessments results were also reviewed at the final three stakeholder meetings, along with working group and public comments on actions. A list of assessment criteria is included in Appendix 1.

9. Comparison to NEG Baselines, Goals, and Progress; Identification of New Actions

Following the first round of mitigation options analysis, CCAP provided an estimate of total potential GHG reductions from all potential reductions and graphed this “progress line” in comparison to draft baselines and NEG/ECP targets for 2010 and 2020. Stakeholders, working groups, and the public reviewed this initial summary of potential actions. Because the results fell short of the targets, the stakeholders were asked to identify any additional actions or alternative policy designs that might close the potential gap between the progress line and the targets. This process was repeated at each remaining stakeholder, working group, and public meeting to help stakeholders meet or exceed the NEG/ECP targets. The progress lines were consistently below the targets, but they became closer with each iteration. A final progress line with baselines and targets was produced after the last stakeholder meeting and posted for public comment (see discussion on progress toward targets).

10. Identification of Cross-Cutting Issues

At the third stakeholder meeting, CCAP summarized working group findings related to potentially cross-cutting issues. The group formulated responses to each potential need in the following manner:

- Education issues were referred to a new working group, led by Lynn Stoddard of the Connecticut DEP, with a request that a draft proposal be presented at a later stakeholder meeting (see later discussion of education recommendations).
- Reporting and registry issues were referred for further discussion by stakeholders pending distribution and review of a white paper by CCAP. This paper was available for review prior to the final stakeholder meeting, but not in time for working group review and action. As a result, stakeholders recommended that a short, summary version of this paper be included in final report as a basis for further discussion on the issue (see subchapter on reporting and registry).
- Technology issues were referred to a special workshop on hydrogen and fuel cells, jointly sponsored by Yale University, The Connecticut Clean Energy Fund, and Environment Northeast on September 19, 2003. Recommendations for actions involving these technologies were included in specific recommendations of the transportation and RCI working groups.
- Cap-and-trade issues were referred to the electricity working group for further discussion (see subchapter on electricity and cap-and-trade recommendation).

11. Identification of Actions With Unanimous Consent

At the second-to-last stakeholder meeting, stakeholders reviewed all potential recommendations and assessments by working groups. CCAP reviewed the list of recommendations and related assessments for each action, then asked for clarifying questions on options and statements of opposition. Where no opposition was registered, actions were recorded as final recommendations with “unanimous consent.” Where opposition existed, CCAP asked for clarification of the reasons for opposition, then requested proposals for alternative approaches or policy designs.

Following discussion of proposed alternatives, CCAP again asked for clarifying questions and any statements of opposition. Where no opposition was registered, actions were recorded as final recommendations with unanimous consent (28 in total). Where opposition was registered, CCAP asked for clarification of the reasons for opposition and recorded actions as “pending,” with specific guidance to working groups for further action. The public was also asked to identify potential alternative design approaches and issues for working group action prior to the next meeting, and feedback was provided to the working groups.

12. Iteration to Consensus Through Alternative Policy Designs

Between the second-to-last and the last stakeholder meetings, working groups focused on resolving pending actions by identifying alternative policy designs and approaches, and finalizing mitigation analysis and baselines. Working groups provided final recommendations for stakeholder consideration at their final meeting.

13. Final Voting (Stakeholders)

At the final stakeholder meeting, stakeholders reviewed the actions agreed to at the last stakeholder meeting and a summary of progress toward the NEG/ECP targets based on consensus and pending actions. CCAP then reviewed the list of pending actions and repeated the voting process used at the previous meeting. Extended discussion was permitted on recommended actions that faced opposition in order to allow alternative design proposals to be made and discussed. Final votes were recorded for all remaining actions (27 in addition to the 28 agreed to at the previous meeting). During these discussions, stakeholders noted priority action areas that could further reduce GHG emissions to meet NEG/ECP goals. Those areas are noted in the discussions of actions in this report.

Of the 55 total recommendations, stakeholders supported 52 by unanimous consent; 3 fell one vote short and were recorded as passing with a supermajority. Final recommendations closed 72.7 percent of the gap toward the 2010 NEG/ECP target and 70.7 percent of the gap toward the 2020 target, not including actions that reduce black carbon emissions. When black carbon reduction actions for transportation are included, stakeholder recommendations closed 75.6 percent of the gap toward the 2010 NEG/ECP target and 80.1 percent of the gap toward the 2020 target.