Governor’s Council on Climate Change (GC3)
MEETING MINUTES

Meeting Date: November 13, 2015
Meeting Time: 2:00 p.m. — 4:00 p.m.
Meeting Location: Office of Higher Education
Board Room, 1st floor
61 Woodland Street, Hartford
## ATTENDENCE

<table>
<thead>
<tr>
<th>Working Group Members</th>
<th>Title</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Robert Klee</td>
<td>Commissioner</td>
<td>Department of Energy &amp; Environmental Protection</td>
<td>Y</td>
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<tr>
<td>Bryan Garcia</td>
<td>President and CEO</td>
<td>CT Green Bank</td>
<td>Y</td>
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<tr>
<td>Scott Jackson</td>
<td>Under Secretary for Intergovernmental Policy</td>
<td>Office of Policy Management</td>
<td>N</td>
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<tr>
<td>Melody Currey</td>
<td>Commissioner</td>
<td>Department of Administrative Services</td>
<td>Y</td>
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<tr>
<td>James Redeker</td>
<td>Commissioner</td>
<td>Department of Transportation</td>
<td>Y</td>
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<tr>
<td>John Humphries</td>
<td>Convener</td>
<td>CT Round Table on Climate &amp; Jobs</td>
<td>Y</td>
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<tr>
<td>Catherine Smith</td>
<td>Commissioner</td>
<td>Department of Economic &amp; Community Development</td>
<td>Y</td>
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<tr>
<td>Hermia Delaire (on behalf of Evonne Klein)</td>
<td>Program Manager</td>
<td>Department of Housing</td>
<td>Y</td>
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<tr>
<td>James O'Donnell</td>
<td>Executive Director</td>
<td>CT Institute for Resilience &amp; Adaptation</td>
<td>Y</td>
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<tr>
<td>David Robinson</td>
<td>Executive Vice President and General Counsel</td>
<td>The Hartford</td>
<td>Y</td>
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<tr>
<td>Lynn Stoddard</td>
<td>Director</td>
<td>Institute for Sustainable Energy</td>
<td>Y</td>
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<tr>
<td>Don Strait</td>
<td>Executive Director</td>
<td>Connecticut Fund for the Environment</td>
<td>Y</td>
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<tr>
<td>Kate Boucher (on behalf of Art House)</td>
<td>Staff Attorney</td>
<td>Public Utilities Regulatory Authority</td>
<td>Y</td>
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<tr>
<td>George Badner (on behalf of Katharine Wade)</td>
<td>Commissioner</td>
<td>Department of Insurance</td>
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<tr>
<th>Associated Staff</th>
<th>Title</th>
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<tbody>
<tr>
<td>Keri Enright-Kato</td>
<td>Director</td>
<td>DEEP Office of Climate Change, Technology &amp; Research</td>
<td>Y</td>
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<tr>
<td>Jeff Howard</td>
<td>Environmental Analyst</td>
<td>DEEP Office of Climate Change, Technology &amp; Research</td>
<td>Y</td>
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<tr>
<td>Jessie Stratton</td>
<td>Policy Director</td>
<td>DEEP</td>
<td>Y</td>
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<tr>
<td>Tracy Babbridge</td>
<td>Bureau Chief</td>
<td>DEEP Bureau of Energy &amp; Technology Policy</td>
<td>Y</td>
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<tr>
<td>Arthur Marin</td>
<td>Executive Director</td>
<td>NESCAUM</td>
<td>Y</td>
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<tr>
<td>Paul Miller</td>
<td>Deputy Director &amp; Chief Scientist</td>
<td>NESCAUM</td>
<td>Y</td>
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<td>Jay Bruns</td>
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<td>The Hartford</td>
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<tr>
<td>Jessica LeClair</td>
<td>Program Manager</td>
<td>CT Institute for Resilience &amp; Climate Adaptation</td>
<td>Y</td>
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AGENDA & NOTES

Welcome and review meeting agenda
Robert Klee, Commissioner, CT Dept. of Energy & Environmental Protection (DEEP)

- Commissioner Klee Provided a welcome and brief introductory remarks.
- A review of the agenda was given.
- Request for those in attendance to sign in and to indicate if they wished to make a public comment. Those not physically present were advised on the WebEx procedure.

Review and discuss GC3 process and decision making
Robert Klee, Commissioner, DEEP

- Discussion on GC3 and working group procedures and decision making processes.
  - Proceedings of the GC3 and working groups are meant to be a consensus based process.
  - Addressed whether any member favored a formal voting process rather than the consensus style.
  - Agreement favored a consensus based process with note that the minority favor may be mentioned in the meeting minutes.
  - Goal is to operate in a way that that all voices feel that they have been heard.
- Working group process guidance.
  - Agenda items can be added both by approaching the work group co-chairs or the commissioner as the chair of the GC3. New business could be added to the current meeting agenda or if a longer discussion is needed, the topic could be added as an agenda item for the next meeting.
  - Discussion about the need to be clear about how and when a final decision is made with a clear understanding of next steps.
- A draft of the meeting minutes will be distributed to GC3 members as expeditiously as possible to allow members to review for accuracy. Corrections and feedback on meeting minutes will be incorporated and the final version of the meeting minutes will be approved upon final review by members.
- DEEP staff will prepare a one page proposal on process and decision making for review by full Council.
- General agreement on the need to extend the deadline for the submission of the Exploratory Report submission at the end of January.

Leadership, Accountability, and Engagement Working Group
Bryan Garcia, President & CEO, Connecticut Green Bank

- Summary of LAE working group meeting held on October 16, 2015.
- Review of Yale student team research:
  - The Yale team is currently interviewing identified persons/organizations that have demonstrated success of leadership, accountability, and engagement. They have conducted 15 interviews and will conduct a total of 21.
  - The definitions of leadership that were developed during the first LAE working group meeting were used to help determine the interview questions.
The work and report, expected in December, will summarize models of success across all sectors; public, private and non-profit.

The LAE Chairs will send around the list of organizations being interviewed for review and additional suggestions by GC3 members.

Discussion

- The report will serve as a great inventory of what is currently happening in CT and around the country and will provide insight on what types of recommendations the working group should put forth in the Exploratory Report.
- Define what terms mean and determine how other companies and organizations are acting and how CT can follow or develop its own model.
- LAE Chairs will send around the interview questions for GC3 members to review and add to.
- Discussion on how leadership should include colleges and universities and it should be factored into the report.
- How is the research the Yale team is conducting looking at or focusing on the transportation sector? It would be good to have an understanding what specifically companies or municipalities are doing to take action on reducing their transportation related emissions.

- Update on Stakeholder information workshop

  - The Stakeholder Engagement workshop is scheduled for December 1st.
  - There will be two 3 hour sessions. One from 2 – 5pm and the other from 6 – 9pm. This will allow for wider participation of stakeholders.
  - General discussion on how best to connect with the list of contacts, and how best to reach representatives to effectively participate in the process for framing a climate change stakeholder process moving forward.
  - Discussion on the need to keep momentum going and the need to engage people. Also, there is a need to find others within the community that can help to carry the message.

Questions/comments from members on stakeholder workshop:

- How is the word about the workshop getting out?
  - There was a large process of identifying representatives from all different segments; businesses, municipalities, environmental, education, labor groups, transportation, fuels, and religious groups. Invitation letters were sent to heads of organizations within each segment.
  - A list will be sent out to the GC3 to identify potential gaps in the invitation list.
- What level of representation should stakeholders send to these meetings?
  - We want them to send someone who is able to be articulate in the discussion and recognized as a voice of the organization.
- This workshop will not be the only point in time in which stakeholder engagement will occur. It is only the first opportunity of many and will focus on developing the design and process of stakeholder engagement for the future, not policy development for GHG mitigation.

Analysis, Data, and Metrics Working Group

Robert Klee, Commissioner, DEEP

- Summary of ADM working group October 14, 2015 meeting
- Consumption based accounting for the electric sector for building the reference case (business as usual) presented by Paul Miller of NESCAUM.
Discussion on the decision to use consumption based approach to measure GHG emissions as part of the reference case. Due to the nature of the regional grid system and for consistency with surrounding states and their accounting and mitigation efforts, it makes sense to use a regional consumption based approach.

- Doesn’t the state have greater control on in-state generation – since the state has control on the types of power plants that get built in the state?
- Not necessarily; once power plants are built, we have no control on how power plant electric generation is dispatched. ISO New England controls this. New power plants are also sited and built based on ISO New England’s request for additional generation.
- It could be argued that the state has greater control levers on consumption through things like energy efficiency, shifting to in-state behind the meter generation, or procurement of large scale renewables elsewhere.

- We have a rigorous RPS so how do we take credit for this policy mechanism? Out of state mitigation? Maine wind factored into CT’s GHG inventory?
  - CT’s RPS policy is driving developments in other states so we should get credit for it.
  - Information on generation is still there, it does not get lost, but it’s not a one for one carbon mitigation strategy. The region as a whole gets cleaner and CT does get some credit under the consumption accounting methodology.

- How does a regional natural gas expansion plan fit into the consumption based accounting?
  - If the region takes a consumption based approach in the electric sector than the carbon imbedded in natural gas will be accounted for. For instance, MA uses a consumption approach and would have to take responsibility for the embodied carbon in any natural gas they consume, as would CT.

- Consensus is to look at both consumption and generation accounting. NESCAUM should be able to generate information both ways and then make a decision on how to proceed from there.

- Economy-wide consumption accounting has been conducted by the state of OR, but this is not something that NESCAUM can take on as a part their current work.
  - Future decisions may require knowledge about lifecycle. Investment in alternate fuel use, such as batteries, could make the decision making process more difficult without understanding the full lifecycle costs.
  - The GC3 can consider how it can partner with academic institutions to advance efforts on considering lifecycle costs in its analysis. A recommendation could be to create university partnerships.
  - Council Chair recommends that members watch the Oregon Consumption Based Accounting Webinar to fully understand the benefits and challenges to taking on economy-wide consumption-based accounting.

- Revision of NESCAUM deliverables timeline
  - Review of NESCAUM’s updated time schedule with slight adjustments to timeframes, Phase 1 is extended to February and phase 2 will be in August.
  - Final recommended strategies by December of 2016 have not changed.

Leadership in the Transportation Sector
Robert Klee, Commissioner, DEEP

- Review of emissions from the transportation sector
  - 40% of CT’s GHG emissions come from the transportation sector; of that approximately 60% are from highway vehicles (both cars and light-duty trucks). Overview of California Low
Emission Vehicle Program and the requirements CT has adopted with respect to the zero-emission vehicle program. California has taken the position that all new vehicle sales will need to be ZEVs by 2050.

- Discussion on how the Clean Air Act preempts states from establishing their own motor vehicle emissions standards. CA is grandfathered as they had a standard prior to the Clean Air Act. States are allowed to adopt CA standards over federal. CA standards are always stricter. CT has adopted CA standards.
- Review and discussion of CA’s working assumptions and whether CT should be using something similar.
- Discussion on the turnover effect in vehicle fleets. In 2050 all new vehicles in CA have to be EV but 25% of vehicles on the road will still be older vehicles.
- Are we not going to see a significant reduction in GHG emissions from the transportation sector because of the vehicle turnover until after 2030?
  - We have to look very carefully at this when we set an interim target.
- If we deploy electric vehicles, what type of emissions reductions will we see with our current mix of electricity generation?
  - If you deployed electric vehicles across all of CT today, you would see an overall reduction in GHG emission from the transportation sector, but in order to achieve the 80% emissions reductions target in 2050 we need to focus on emission reductions across all 3 sectors; transportation, electricity, and buildings.

- NESCAUM presented a general overview of fuel switching options for cars, trucks, bus, rail, aviation and marine and highlighted the need to attack all components of the transportation sector simultaneously.
  - Bio fuels appear to be the best option for long haul trucks, marine, and aviation since they are not good candidates for electric power. Advanced biofuels are clean if looked at in a life cycle model but as far as tail pipe emission they are not much better than gasoline. Connecticut may not see the benefits of carbon sequestration from production of these biofuels.

- Lead by example initiatives
  - David Robinson, Executive VP and General Council, The Hartford, provided an overview of the Hartford’s strategy to deploy EV charging and the link to recruiting new employees. Use of the charging stations has been high along with demand for high-speed chargers.
  - It is importation to look into what the state agencies are doing. We need to look at if we are being as forward thinking as possible. We need to look at what companies are doing and see if they can be applied to state agencies.
  - Commissioner Currey described DAS’ efforts to assess opportunities to deploy more vehicle charging stations statewide. DAS is looking at purchasing several EVs for the state fleet as part of the pooled fleet. DAS is also reaching out to other agencies to purchase EVs utilizing incentives that are available.
  - When DAS began buying Priuses, the opportunity to test drive and gain a firsthand experience was a great way to help people become comfortable with an alternative technology.
  - Currently working to make sure all new state buildings have charging stations, older buildings should be encouraged to have them as well.
  - Suggestion to look at status of CT state agencies in terms of EV procurement and assess what additional measures can be taken to “Lead by Example”, promoting education and awareness to others, opportunities for employees to experience and “test drive” technology.
  - DEEP is applying 1.5 million in incentives to increase the numbers of EVs within the state fleet.
Review workplace charging efforts: what are the benefits, challenges, and how can the state lead.
• A group discount model for solar is being used by the CT Auto Retail Association could also be used with EVs and could cause an uptick in sales.
• What could CT do to make transit oriented development overarching?
  ▪ It’s too narrow and we need to think broader. We need a nexus of transport and land use planning. Planning transit is not going to work unless you have the support of development in place. New Jersey has a mandatory state plan, CT does not.
• How do we align the public transportation system so people utilize it more often?
  ▪ It has not been reevaluated in 20-30 years. If we rearranged it we would get between an 8-12% increase in use, which is not a huge wedge.

GC3 administrative updates
Keri Enright-Kato, Director of the Office of Climate Change, DEEP
• Exploring Climate Solutions Webinar Series
  o Webinars are posted on our DEEP website. They are recorded and can be watched at your leisure.
• Future meeting dates and locations
  o LAE working group meeting November 17, 2015 from 1-3pm
  o Stakeholder workshop on December 1, 2015.
  o ADM working group meeting December 3, 2015 from 2:30-4:30
  o LAE working group meeting December 9, 2015 from 2 - 4pm

Closing Comments:
• We can try to frame the next GC3 meeting to have a similar flow.
• Would like to have discussion about our interim target and get different people’s perspectives.

Public comments
Heather Burns, President of CT Sustainable Business Council:

Stephen Marlin, Metro Pool:
Metro Pool is a company involved with providing transportation demand services and eco driving along with other programs. Efficiencies can be gained by simple behavior modifications. Stephen is excited about the path that the council is taking and congratulates The Hartford on their EV program.

Henry Link, Enviro Energy Connections:
Henry suggested that rather than just tracking GHG emissions that we also track vehicle miles traveled and kilowatt hours. Electric vehicles may not help if vehicle miles traveled go down. Efficiency measures have only done so much to reduce the number of kilowatt hours.
**Chuck Brody:**
Chuck presented 3 observations to the council. 1) Some best practices may be appropriate and feasible for 1 group but not for another, therefore diversity in best practices is needed. 2) Don’t get trapped into saying that something can’t be done until we have perfect data, reductions need to start sooner than later. 3) Be careful about saying “either or” this should be thought of as an integrated system and it should be viewed holistically. Chuck gave the example of a charging station being powered by solar or a fuel cell.

**Mike Morrissey, State Director of the National Propane Gas Association:**
Spoke on behalf of the Alternate Fuels Coalition of Connecticut. Mike asks that alternate fuels be recognized and advocated propane as an alternative fuel. There is no silver bullet when it comes to alternate fuels. Propane (autogas) is the 3rd leading transportation fuel in the world and the number 1 alternative fuel. Almost all of the propane brought to market is produced in America and we have a lot of it, it is not an experimental fuel and it has been used in transportation for almost 100 years. Propane is available to everyone in CT because of its portability, and the dispensing systems are a fraction of the cost of those used for natural gas and therefore autogas is ideal for small and medium sized fleets that do not see large returns on investment. Mike mentioned several cities and towns running on autogas, or planning to run on autogas, including Torrington, Boston, Shelton and Waterbury.

**Joel Gordes:**
Mentioned UTC as a leader and cautions the use of biodiesel.

**David Schnieder:**
Suggested that we encourage the use of electric vehicles in carpooling services such as easy street.