
**Governor's Council on Climate Change (GC3)
Buildings Break Out Session
MEETING MINUTES**

**Meeting Date: September 23, 2020
Meeting Time: 4:00-6:30 pm
Meeting Location: Zoom**

ATTENDANCE

Amanda Clark
Bernie Pelletier
Jeff Howard
Michael Malmrose
Elina
Tanya Dwyer
Bud McAllister
Madhav Munshi
Wayne Cobleigh
John DiModica
Leticia Colon de Mejias
Michelle Helou

AGENDA & NOTES

Buildings Breakout Group

Facilitated by Bernard Pelletier, People's Action for Clean Energy

Discussion

- **Tanya Dwyer**
 - Carbon sink techniques are against code in Connecticut. How can we fix that?
 - Spray foam requirement become a liability in the summer. How can we address some of these safety issues?
- **Bernie Pelletier**
 - There are building styles (high rises) where 100% electrification is difficult.
 - Need to ensure equitable distribution. If LMI folks pay 20% into the fund, they by law should get 20% of the incentives to be equitable. Is this the fair way to do so?
 - **Leticia Colon de Mejias:** EEB and DEEP determine cost effectiveness. There's a bill that would add societal benefits into the cost effectiveness analysis. Department of health should get involved.
 - We need to work from the ground up and meet people from top down. Need to empower the local towns to come up with local solutions.
 - Ambitiously recommending doing deep energy retrofits of large older building at scale. (Energysprong program)
 - **Madhav Munshi**
 - NY is also using the energysprong program
 - <https://www.nyserda.ny.gov/All-Programs/Programs/RetrofitNY/What-is-RetrofitNY>
 - **Wayne Cobleigh**
 - <https://energiesprong.org/>
 - Smart building controls. As you tighten up the building shell, you need to start thinking about ventilation and other air quality control systems.
 - You can have good mechanicals but if the controls are unengaging, you will still get poor performance.
 - The EEB are mostly a group of volunteers. When we enhance outreach efforts we need to up our efforts. Possibly even engaging in Door-to-door knocking. People are paying disconnection and reconnection fees when they don't have to because they have not been reached by current, inadequate outreach efforts.
 - Regarding Renewable Thermal: (air source heat pumps, and ground source.) There is still some use for biofuels. Currently 80/20 biodiesel heating oil blends as a bridge fuel can be used in homes that heat via oil. Connecticut is currently a net exporter of biodiesel because we can't use all that we produce. This also helps with the waste reduction aspect.
 - **Jeff Howard**
 - RTT also includes compost heat recovery and solar space heating among other things.
 - [via chat] Compost heat recovery in CT: <https://energynews.us/2019/02/15/northeast/compost-heat-recovery-helps-cut-costs-boost-revenue-for-connecticut-farm/#:~:text=The%20Collins%20Powder%20Hill%20Farm%20in%20Enfield%2C%20Connecticut%2C%20was%20the,aeration%20and%20heat%20recovery%20system.&text=The%20Agrilab%20Technologies%20system%20has,by%20recovering%20heat%20from%20compost.>
 - **Tanya Dwyer**

- [via chat] Passive thermal is the best zero energy thermal. Compost heat recovery on the block or passive solar hot water systems.
 - [via chat] Are we giving incentives to builders to use green methods?
- **Wayne Cobleigh**
 - In Boston at BU a new high rise building is going in that would be electrified through the use of ground source heat pumps.
 - **Michael Malmrose**
 - [via chat] Is it the building that BU is putting in to house the Data Science department that they are developing?
 - <http://www.bu.edu/articles/2019/bostons-biggest-geothermal-system-makes-its-debut/>
 - **Wayne Cobleigh**
 - [via chat] BU High Rise office building in Boston without natural gas <https://brplusa.com/projects/boston-university-center-computing-and-data-science>
- **Bud McAllister**
 - [via chat] Need to develop the following: LEAN MFG, LEAN Healthcare, Common Good Finance, Common Good Earth, public banking.
- **Michelle Helou:**
 - Heat pumps are great when working with ductwork is not practical. But we're on 50% natural gas in Connecticut, so this is still not clean. How does the math work out?
 - **Jeff Howard**
 - Even when accounting for electric source and line losses etc., the heat pumps are still cleaner than the direct fossil fuel alternative. The electric sector report is pushing toward moving toward less fossil fuel usage. A heat pump installed today will use less fossil fuel than the alternative. Five years from now that same heat pump will be substantially better than fossil fuels.
 - **Bud McCallister**
 - Heat pumps could be zero emission if powered by solar. This could be done with microgrids.
 - As of January we have shared community facilities (Shared Solar Facilities.)
 - **Bernie Pelletier**
 - Community microgrids are a model that addresses some of the line loss and storage challenges to the current grid.
 - Heat pumps will exacerbate the winter peak problem, but it is a solvable problem.
 - **Tanya Dwyer**
 - [via chat] Micro-grids make us so much more resilient and it can be so much more affordable and clean.
 - Department of housing already requiring incorporating better insulation and more energy efficient buildings. This is probably the better first move than mechanical upgrades.
- **John DiModica**
 - [via chat] I would simply like to see that Energy Savings Performance Contracting is recognized/identified/promoted as a strategy for public and institutional customers to consider in order to assess and develop comprehensive energy efficiency project opportunities. This is both a financial and technical solution. I would be pleased to provide more insight/information on this at the request of the committee.
 - **Jeff Howard**
 - [via chat] Shared Clean Energy Facilities <https://portal.ct.gov/DEEP/Energy/Shared-Clean-Energy->

GC3 NAME OF WORKING GROUP

09/23/2020

[Facilities/Shared-Clean-Energy-Facilities](#)

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