

# STEERING COMMITTEE ON STATE SUSTAINABILITY

SEPTEMBER 11, 2020



**greenergovCT**

A Lead by Example Initiative

The background features a white central area with decorative elements: a teal brushstroke in the top-left corner, a yellow brushstroke in the bottom-right corner, and several light blue and light green organic shapes scattered throughout.

**WELCOME  
BACK!**

# AGENDA



**greenergovCT**

A Lead by Example Initiative

Welcome Back (5 mins)

Sustainability Impacts from Telework (15 mins)

Data Dashboard (5 mins)

Energy Audits/Financing Update (10 mins)

State Waste Management Update (5 mins)

What's Next (5 mins)



**SUSTAINABILITY  
IMPACTS FROM  
TELEWORK**



# EVERSOURCE ELECTRIC

6.01% decline in Eversource electric usage

# EVERSOURCE NATURAL GAS

16.26% increase in Eversource natural gas usage

**Compared March to  
July 2019 to the same  
period in 2020.**

**Data was weather normalized to  
remove the effects of weather  
sensitivities.**

# EVERSOURCE ELECTRIC

# HOW WE PULLED THE DATA

Reporting Node Name	Cost (\$)	Use (kWh)	Cost (\$) %	Use (kWh) %
DAS_Reporting	-\$374,508.76	-2,609,227.81	-22.01%	-23.32%
MHA_Reporting	-\$37,789.85	-265,090.31	-4.42%	-4.74%
ESPP_Reporting	-\$36,511.21	-273,221.91	-4.69%	-5.31%
MIL_Reporting	-\$25,246.37	-222,384.07	-5.49%	-7.53%
DSS_Reporting	-\$24,860.77	-165,487.27	-16.36%	-18.70%
DEEP_Reporting	-\$19,681.05	-149,161.63	-12.03%	-19.73%
DCF_Reporting	-\$15,226.73	-90,946.11	-10.16%	-10.20%
DOA_Reporting	-\$9,404.74	-57,775.14	-96.06%	-97.29%
DMV_Reporting	-\$9,213.18	-60,188.96	-10.59%	-12.25%
ADS_Reporting	-\$4,704.07	-19,268.14	-18.24%	-13.41%
DVA_Reporting	-\$3,972.31	-38,258.80	-4.39%	-6.17%
DOL_Reporting	-\$3,811.34	26,056.04	-2.00%	2.10%
CSL_Reporting	-\$3,501.23	-34,124.19	-20.28%	-32.93%
DOC_Reporting	-\$3,258.10	-33,551.16	-0.71%	-1.11%
DCJ_Reporting	-\$3,204.55	-20,345.55	-4.51%	-4.40%
WCC_Reporting	-\$335.65	-2,548.88	-7.78%	-9.35%
ECD_Reporting	-\$320.38	-780.43	-9.54%	-6.25%
AES_Reporting	-\$109.24	-809.77	-1.49%	-1.95%
SDE_Reporting	\$19,033.61	1,987.76	2.39%	0.04%
DDS_Reporting	\$20,725.51	22,393.31	9.37%	1.78%
DOT_Reporting	\$26,518.56	235,365.13	1.11%	1.75%
DPH_Reporting	\$30,233.95	432,208.58	8.38%	18.52%
<b>Eversource ELE</b>	<b>-\$479,148</b>	<b>-3,325,158</b>	<b>-5.33%</b>	<b>-6.01%</b>

Eversource Electric Change between Mar - Jul 2019 and Mar - Jul 2020

## Report-02 - Ranking Report

Rank	Building Name	Building Code	Annualized Use Per Area (MMBtu/SqFt)	Annualized Cost (\$)	Annualized Use (MMBtu)	Current Floor Area (SqFt)
1	Steam Plant - Vendor Bills	NW-STEAM_PLANT-VENDOR_BILLS	12.10	\$2,759,459	\$44,652	45,000
2	Classroom Building	CLASSROOM	2.84	\$839,787	170,566	80,000
3	Science Laboratory	LABORATORY	2.03	\$748,076	151,958	75,000
4	Performing Arts Center	MUSIC	1.33	\$656,482	133,351	100,000
5	Gymnasium	GYMNASIUM	1.12	\$443,076	89,934	80,000
6	Los Angeles Mall - Store C	SW-LA_MALL-STORE_C	1.00	\$55,029	1,897	1,900
7	Los Angeles Mall - Store A	SW-LA_MALL-STORE_A	0.94	\$51,899	1,690	1,800
8	Los Angeles Mall - Store B	SW-LA_MALL-STORE_B	0.93	\$56,112	1,867	2,000
9	Heinz Towers	NE-BUILDING_B	0.48	\$2,444,856	286,302	601,500
10	Student Union	STUDENT_UNION	0.39	\$286,518	60,444	154,000
11	Building J	SW-BUILDING_J	0.29	\$211,751	11,287	39,079
12	Underwood Aquarium	NE-BUILDING_J	0.29	\$249,702	11,191	38,779
13	Mary Ann's Mini Mall	NE-BUILDING_D	0.22	\$131,109	5,112	23,113
14	Building I	SW-BUILDING_I	0.15	\$116,941	4,571	31,279
15	Krocker Conservatory	NE-BUILDING_I	0.15	\$117,790	4,484	30,979
16	Kraige Courthouse	NE-BUILDING_E	0.14	\$141,498	2,940	20,569
17	Greer	MID-BUILDING_G	0.13	\$163,801	5,475	42,000
18	AP	405	0.13	\$46,532	2,582	20,065
19	EnergyCAP Convention Center	NE-BUILDING_G	0.11	\$142,568	4,769	44,143
20	Building H	SW-BUILDING_H	0.10	\$32,093	1,193	12,240
21	Natier's Cat Rescue	NE-BUILDING_H	0.10	\$31,711	1,163	11,840
22	PA Warehouse	MID-BUILDING_D	0.09	\$52,576	2,000	22,000
23	Smith Offices	NE-BUILDING_C	0.09	\$985,919	43,123	491,025
24	Condo's Place	NE-BUILDING_A	0.09	\$517,184	57,219	658,185
25	SC Warehouse	MID-BUILDING_E	0.07	\$89,431	1,470	21,000
26	Bick's Barracks	NE-BUILDING_F	0.01	\$4,347	205	29,087
27	Anderson	MID-BUILDING_F	0.01	\$4,347	205	30,000
28	DOT	SE-BUILDING_F	0.00	\$0	1,707	
28	GOV	SE-BUILDING_G	0.00	\$0	3,546	
28	Steam Plant - Production	NW-STEAM_PLANT-PRODUCTION	0.00	\$2,689,260	595,314	
28	Steam Plant - Vendor Bills	NW-STEAM_PLANT-VENDOR_BILLS	0.00	\$107,705	0	45,000
28	Underwood Aquarium	NE-BUILDING_J	0.00	\$22,960	0	38,779

# OPPORTUNITIES FOR BUILDING OPTIMIZATION

As shown in the previous slide, building energy savings don't just happen automatically or passively just because occupancy is reduced.

- How can building managers and SSOs understand how their building is operating and where they can optimize energy use?
  - **Building re-tuning checklist informed by DOE and CDC**
- How to use EnergyCAP's energy management features: run reports, compare months, etc.
  - **EnergyCAP liaisons will be following up with buildings that showed higher-than-expected energy use**

# OPPORTUNITIES FOR THE STATE BUILDING PORTFOLIO

- Longer term opportunity for more strategic use of state facilities and managing assets
- How can the state optimize its building stock?





**SUSTAINABILITY  
WHILE WORKING  
AT HOME**



# Want lower energy bills?

**We can help!**

For a limited time, home-owners and renters can receive a no-cost home energy assessment and service with up to 100% off the cost of qualified insulation projects.



- For a limited time, home energy services have increased incentives.
- We recommend taking advantage of this if you haven't already!

Call us at 1-877-WISE-USE or sign up online at [EnergizeCT.com](https://www.energizect.com)

**energize**   
CONNECTICUT

Empowering you to make  
smart energy choices





## Start composting

If you live in Hartford or West Hartford [Blue Earth Compost](#) makes it easy to cut down on food waste (the number one material sent to incinerators and landfills in America).

For bi-weekly pick-up, the cost starts at \$12.83/mo plus you receive three 50 lb bags of finished compost per year.

Otherwise, start your own composting set-up to begin turning your food scraps into nutrient-rich compost. [Learn how here.](#)



## Make an Energy Savings Plan

Whether you are a [UI customer](#) or an [Eversource customer](#), you have access to a free energy analysis to help you take control of your energy use.

After inputting your account login and answering a few questions, you can receive free information and advice to help lower your energy bills.

## Make the LED switch

Whenever possible, use ENERGY STAR certified LED lightbulbs. Traditional incandescent bulbs release 90% of the energy they use as heat. LED's are much more efficient, emit very little heat and last 10-25 times longer.



## Opt for the dishwasher

You could save about \$1,300 worth of energy and nearly 230 hours per year of personal time by using a dishwasher instead of hand washing.

You can also check to see if your dishwasher has an eco mode or setting to help save energy and water with each wash.





# VEHICLE FLEET USAGE

- Use across all state agencies **decreased 12.7%, or 641,518 gallons**, from FY19 to FY20.
- **Cost decreased 21.5% for an overall cost savings of nearly \$3.2 million.**
- The cost reduction is partially accountable to a lower annual average fuel price, down 10.5% year over year.
- Only two agencies saw increases in fuel use: DESPP and UCONN, 10.1% and 24.9% increases, respectively.
- DOT, the state's largest fuel user, accounts for 45% of the total reduction in use at 287,738 fewer gallons used, year over year.



# COMMUTING EMISSIONS

- **State employees reduced average commuting emissions by 60%**
  - Comparing March 2020 to August 2020 commuting patterns.
- **This amount is equivalent to the reduction of:**
  - 244 metric tons of CO2 equivalent emitted,
  - 27,461 gallons of gasoline consumed, or
  - 41.3 homes' electricity use for one year.
- **Data Sources:** Used August 2020 OPM data to to obtain metrics on state employee teleworking habits, 2018 CT Census data to obtain data on CT commuting habits, and EPA emission factors data derive GHG emission statistics.

# QUICK DISCUSSION

**How has your agency adapted to COVID-19?**

Write in the chat or request to be unmuted to share!



# DATA DASHBOARD

# DATA DASHBOARD

- Tableau dashboard displaying the FY 2019 Performance Data from the Sustainability Performance Plans
- Allows the user to view data on:
  - Utility use and cost
  - GHG emissions
  - Water usage
- Populated with data pulled from EnergyCAP for the FY 2019 reporting year; data will be updated later this fall
- Accessible via the GreenerGov CT website:
  - <https://portal.ct.gov/GreenerGov/Progress/Reports>





**ENERGY  
AUDITS  
UPDATE**

# ENERGY AUDITS TO DATE

- **Overview**
- **Status**
  - Audits
  - Report Submissions
  - Utility Rebates
- **Prioritization Approach**
  - Typical Energy and Cost Reduction Measures (ECRM)s
- **Implementation - Delivery Methodologies**





# **FINANCING UPDATE**

# ENERGY EFFICIENCY PROJECT FINANCING AND PLANNING

**Project selection:** TAC (OPM, DAS, DEEP, utilities as advisors) will be evaluating energy audit results and selecting projects to be implemented with bond funding and SBEA loans.

## Planning for Additional Audits

- Additional audits may be conducted through the utility's contractors – informed by utility recommendations and energy benchmarking.
- If you think your building fits the criteria for consideration, please contact DEEP.
- We will also be asking SSOs to work with their facility managers to assist with providing information through a water audit form on facility water use and fixtures to identify opportunities for water reduction strategies.





**STATE  
WASTE  
MANAGEMENT  
UPDATE**

# CT'S WASTE MANAGEMENT FUTURE



# CCSMM

**CT Coalition for Sustainable  
Materials Management**



**CCSMM**

Connecticut is looking to the future of waste management.

 [CT.gov](http://CT.gov)

**VISIT [WWW.PORTAL.CT.GOV/DEEP-CCSMM](http://WWW.PORTAL.CT.GOV/DEEP-CCSMM)**



# **NEXT STEPS**

# NEXT STEPS

## Conduct a quick building energy analysis to identify reduction opportunities

- Take a look at your agency's building energy use in EnergyCAP and reach out to your EnergyCAP liaison if you need help running a report.
- If you see higher than expected building energy use, consult the Building operation checklist [will be sent by email next week]
- Reach out to Ryan Ensling if you would like your building to be considered as a candidate for future energy audits

## Start tackling the backlog of invoices for water/sewer, delivered fuels

- Confirm contacts at your agency who can gain access to paper bills and scan/upload **via survey next week.**
- New Level 3 deadline of Dec 31 for all historic invoices starting in FY19

## Be ready to meet in the Project Teams again

- Mary will be reaching out to Project Teams to share full compilation of strategies to date - goal will be to share draft document by next SSO meeting