EARTH DAY STEERING COMMITTEE MEETING

APRIL 22, 2021



WELCOME



AGENDA

- 1. Lt. Gov Remarks (5 mins)
- 2. Co-Chair Remarks (10 mins)
- 3. Agency Actions in 2020 (5 mins)
- 4. Agency Case Studies and Q&A (20 mins)
- 5. Sustainability Project Team Updates (15 mins)
- 6. What's Next (5 mins)



2 YEARS SINCE SIGNING EO 1



TARGETS

GHG

45% reduction in GHG emissions below 2001 levels

WATER

10% reduction in water consumption from a FY20 baseline

WASTE

25% reduction in waste disposal from a FY20 baseline

EMISSIONS BOUNCE BACK

After a sharp drop early in the pandemic, global CO₂ emissions rose as worldwide economic activity recovered in 2020. This trend continued even though some countries put fresh restrictions in place as coronavirus infections soared.



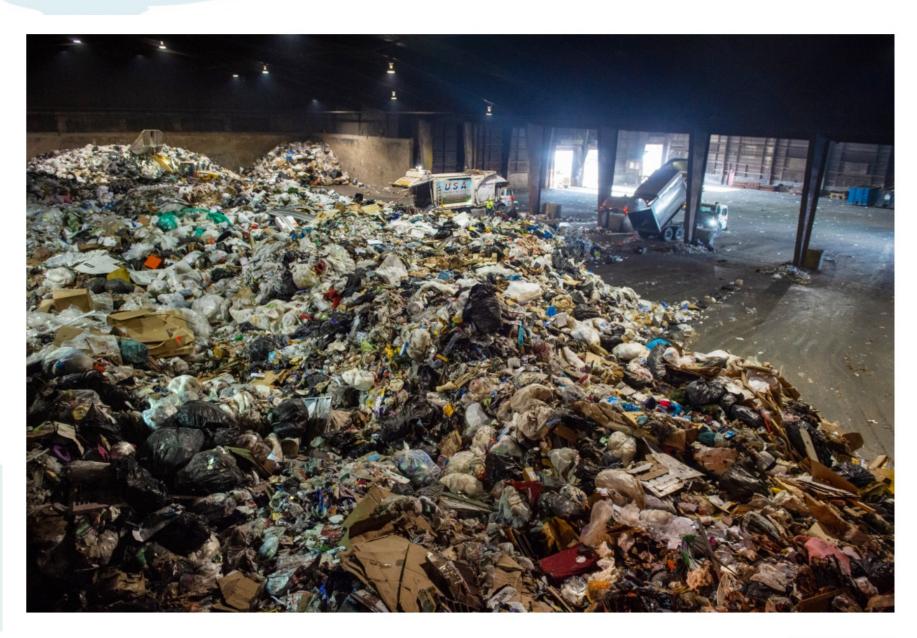
- China imposes lockdown on Wuhan, where coronavirus was first detected.
- 2. Slammed by COVID, Italy issues a national lockdown.
- 3. California becomes first US state to impose a lockdown.
- 4. India begins its first nationwide lockdown
- As Europe surpasses 100,000 new daily infections, countries announce new wave of restrictions.
- 6. California imposes a 3-week lockdown after registering its highest daily total of new infections.

*Megatonnes carbon dioxide.

onature

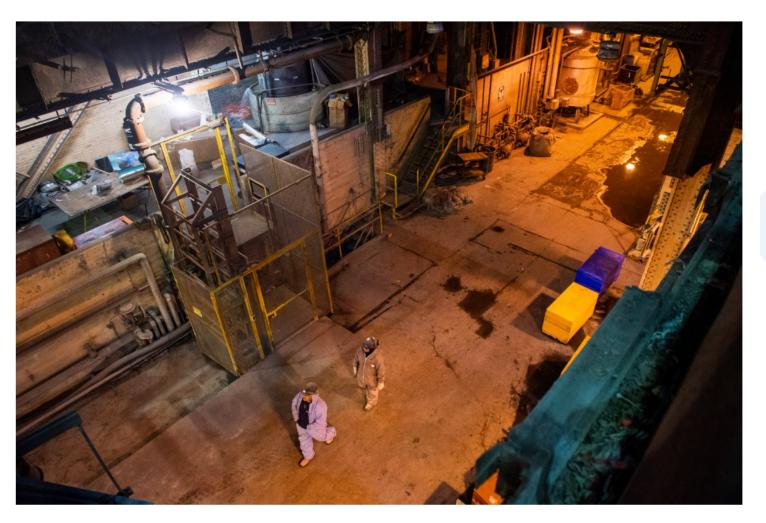
Source: Carbon Monitor programme/Nature analysis





CLOE POISSON

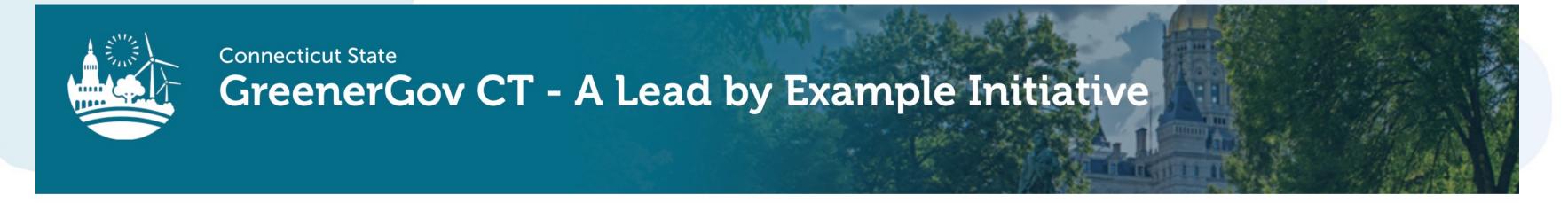
Trash haulers dump their loads on the tipping floor in the waste processing side of the MIRA trash-to-energy plant in Hartford's South Meadows. An average of 2,500 tons of garbage are dumped and processed daily at MIRA for RDF, or refuse derived fuel.



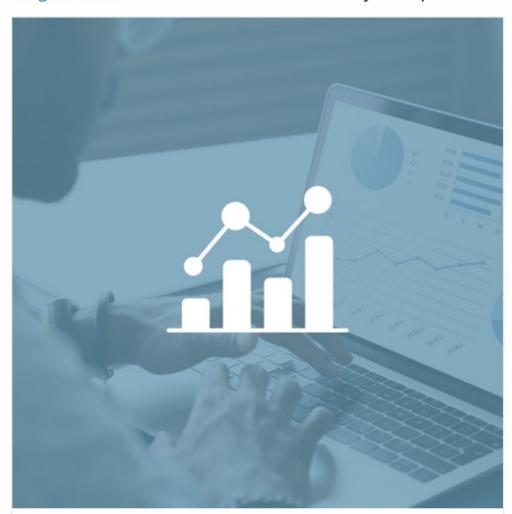
CLOE POISSON

Two workers who maintain the combustion boilers at the MIRA trash-to-energy plant in Hartford walk through the cavernous turbine hall where shredded trash is burned and converted to power that is provided to the state. The hulking brick structure was built in the 1920s, originally as a coal-burning facility.





CT.gov Home / GreenerGov CT - A Lead by Example Initiative



Reports and Data

Clear and transparent reporting is integral to the states lead by example efforts. View the state's data dashboard and sustainability reporting.



Projects

Sustainability projects help our state government realize environmental and economic savings.



Agency Resources

Toolkits, resources, and information for participating state agencies are accessible here.

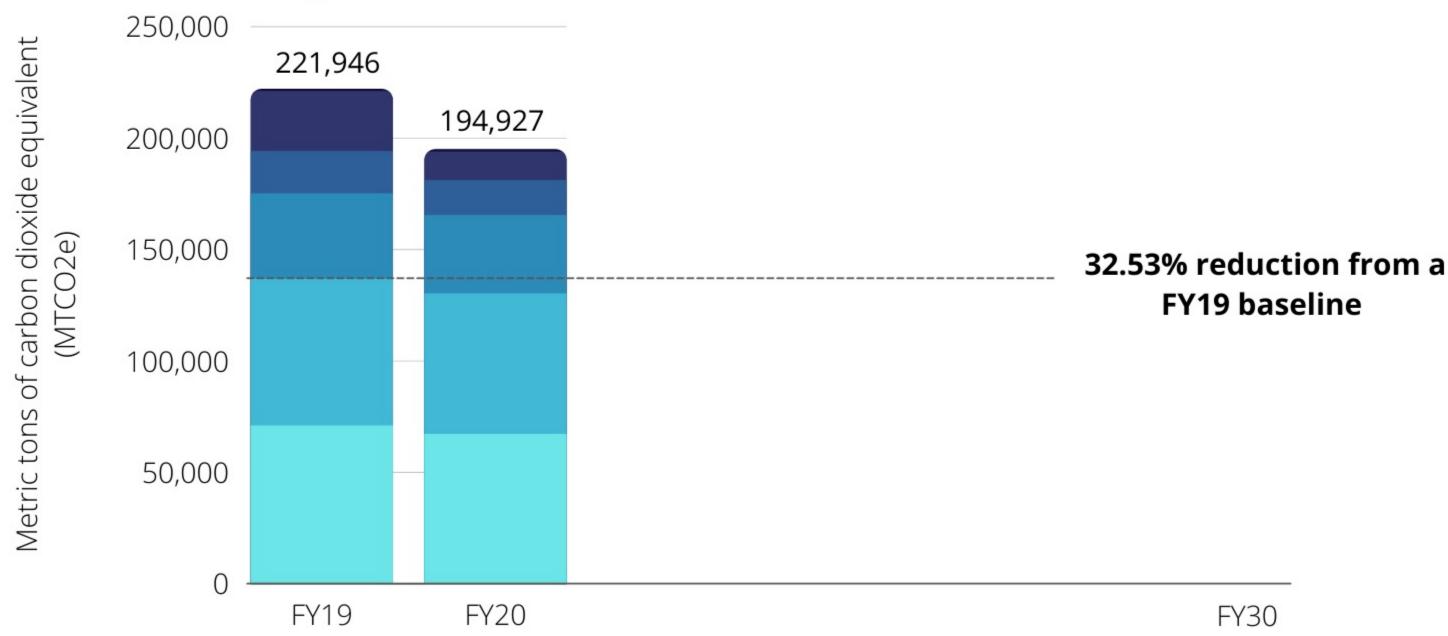
REMARKS FROM LT. GOVERNOR SUSAN BYSIEWICZ



PRIORITIZED ACTIONABLE DATA

GHG EMISSIONS BY SOURCE (MTCO2E), FY19-FY20

Executive Branch Agencies



DEMONSTRATED SAVINGS

OVER THE PAST YEAR - APRIL 2020 TO PRESENT

Executive Branch Electric Use

16%

Executive Branch Natural Gas Use



Avoided Utility Costs



\$4.7M

AGENCY COLLABORATION

Total Project Savings

Executive Branch Agencies

Dollar Savings

\$1,740,486.98

GHG Reduction (metric tons)

10,236

- Projects cover everything from lighting upgrades to LEDs, switching to low-flow plumbing fixtures, upgrading outdated HVAC systems, and running recycling awareness campaigns.
- In 2020, agencies reported 93 sustainability projects, policy changes and initiatives
- 56 projects in the Executive Branch, 37 in voluntary agencies



MORE AVAILABLE FINANCING

Over last 2 years:

- Allocated \$12 million to high-impact DOC energy and water projects
- Authorized \$20 million in new EE bond funding
- Executed the **Master Agreement** to allow streamlined state participation in Utility- Administered Programs

CO-CHAIR REMARKS



OPM PRIORITIES

- Bond funding for priority energy efficiency projects
- New authorization



DAS PRIORITIES

- Process Improvement/Going Digital
- Looking strategically across contracts and procurement
- Accelerating Zero-Emission Vehicles
- Solar PPA

DEEP PRIORITIES

- Target our Smaller Buildings with On-Bill Financing
 - Almost 70% of state's buildings across our portfolio are less than 5,000 square feet – and almost 40% under 1,000 square feet.
- Renewable Thermal
- Food waste diversion



SUMMARY OF AGENCY ACTIONS IN 2020



Key Trends in the SPPS

Themes

- Streamlining operations
- Rethinking strategic uses of property and vehicles
- Moving to digital processes that enhance service delivery
- Handling deferred maintenance

Opportunities

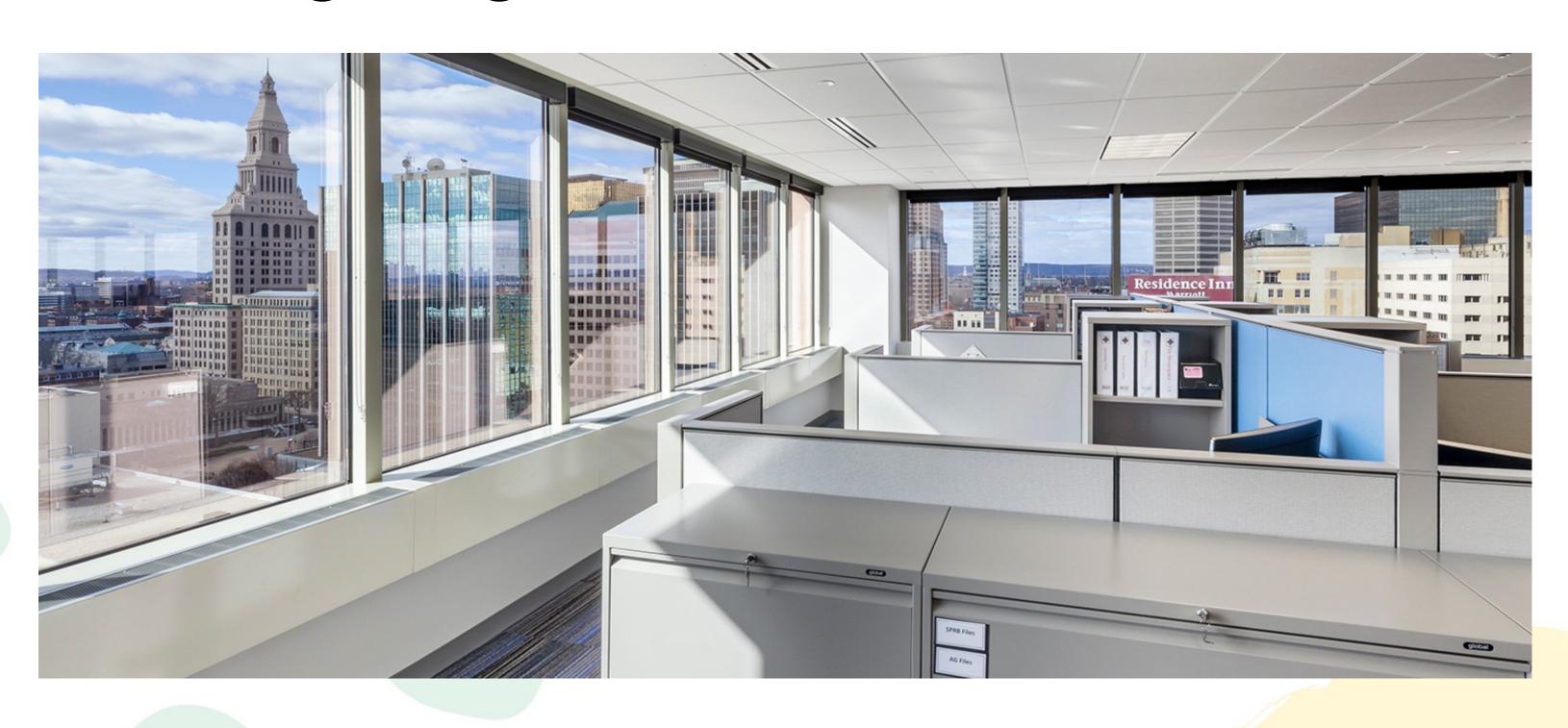
- Accessing utility incentives and SBEA program
- Making Changes When Back at the Office
- Accelerating Progress
- Quantifying savings and impact



AGENCY CASE STUDIES AND Q&A



DAS - Lighting @ 450 Columbus



DMHAS - Solar Charging





DMHAS - Energy Upgrades

LBE Project

- Greater Bridgeport Mental Health Center Energy Upgrades
- Project Scope
 - Installation of new gas-fired hydronic heating system, new sprinklers, new gas line and gas meter, efficiency fan motors, and EMS upgrade
- Savings
 - 875,000kWh
 - \$130,000 cost reduction
 - Payback 9 years

DOT's EV Charging Buildout

- Phase 1 Completed November 23, 2020
- > 3 Chevy Bolts have been received from DAS
- Phase 2 in Progress
 - Design Work is Complete
 - EVSE Units have been ordered
 - Construction Starts June 2021
 - Project Completion November 2021



Photo Credit-Fred Krauth







Photo Credit-Fred Krauth



Behavioral Change Initiatives

- Recycling Bags Program
 - Sustainability Activity Books
- Green Game Day
- EcoMadness Competition
- RecycleTHON
 - EcoCaptains:
 - Student leaders encouraging sustainable behaviors among peers
 - Conduct recycling audits
 - Record 28EcoCaptains!

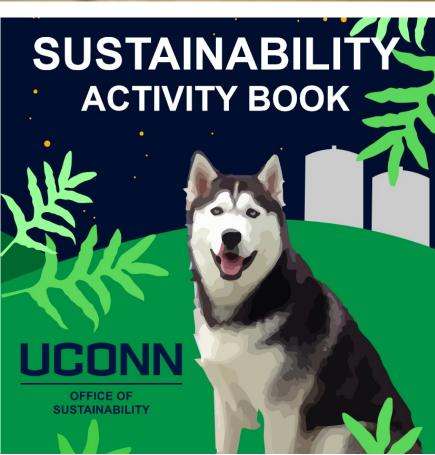






BUCKLE

HICKS



Energy Conservation Program FY 2020

Partnerships with CNG and Eversource Incentivize Projects





Depot Campus Street Light LED Retrofit

Types of Projects completed in FY 2020:

- 63 Lighting Projects
- 27 Heating-Related Projects
- 6 Retro-Commissioning Projects
- 5 Cooling-Related Projects

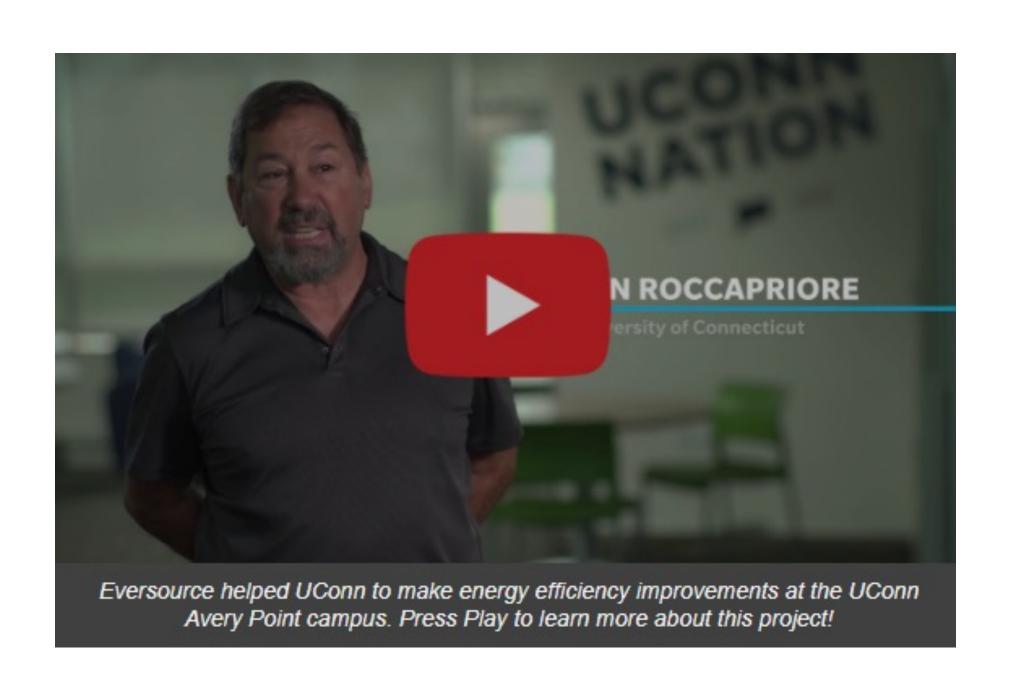
FY 2020 Savings All Projects Combined:

- 3.7 Million Kwh Savings
- 40 Million Cubic Feet Fuel Savings
- \$800,000 in Cost Savings
- 3,500 metric tons of Greenhouse Gas Reductions



Storrs Residence Hall LED Retrofit

Energy Efficiency At Avery Point



 https://www.youtube.com/w atch?v=iKafRP7HHK4

PROJECT TEAM TOPIC UPDATES



TAC PROJECT SELECTION

Ranking Methodology

 The Technical Advisory Council is evaluating energy audit results using a comprehensive scoring system based on overall GHG emission reduction, emission reduction per \$, payback time, and water savings.

Agency 🔻	Location	Building	Auditor	FINAL SCORE A
DOC	Cheshire	Cheshire CI	Gale	0.9
DOC	Cheshire	H.E.T. Building	WSP	0.8
DOC	Hartford	Hartford CC	WSP	0.8
MHA	New Haven	CT Mental Health Center	Colliers	0.8
DOC	Enfield	Willard CI	WSP	0.7
DOC	Newtown	Garner CC	WSP	0.7
DOC	Cheshire	Webster CI	WSP	0.6
DOC	Bridgeport	New Center & Memorial Unit	WSP	0.6
DOC	Uncasville	RL Corrigan	WSP	0.6
DAS	Waterbury	Rowland Govt Center	van Zelm	0.6
DAS	Hartford	450-460 Capitol Ave	Colliers	0.5
MHA	Hartford	CRMHC	Colliers	0.5
ОРМ	East Hartford	Rentschler Field Stadium	Colliers	0.5
DOC	Brooklyn	Brooklyn CC 300 bed facility	WSP	0.5
DAS	Hartford	410 Capitol Ave	van Zelm	0.4
DOC	Enfield	Robinson	Gale	0.4
DCF	East Windsor	Education and Recreation State Receiving Home	CES	0.4
DAS	Norwich	Campbell Medical Building	Colliers	0.4
DAS	Hartford	505 Hudson St	Colliers	0.3
DEEP	Quinebaug	Fish Hatchery		0.3
DCF	Middltown	Building 8	CES	0.3
ESPP	Meriden	Forensic Lab	CES	0.2
ESPP	Middletown	DPS HQ	CES	0.2
DOC	Enfield	Enfield CC	WSP	0.2
MHA	Norwich	Southeastern Mental Health Authority Building	Colliers	0.:



AUDITED FACILITIES

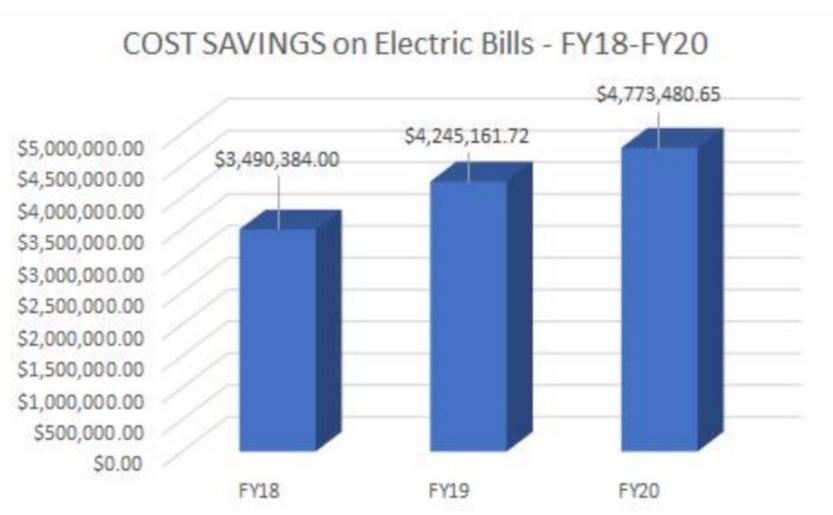
Agency	Location	Building		
OPM	East Hartford	Rentschler Field Stadium		
ESPP	Meriden	Forensic Lab		
ESPP	Middletown	DPS HQ		
DCF	Middletown	Building 8		
DCF	East Windsor	Education and Recreation State Receiving Home		
MHA	Hartford	CRMHC		
MHA	New Haven	CT Mental Health Center		
MHA	Norwich	Southeastern Mental Health Authority Building		
DAS	Waterbury	Rowland Govt Center		
DAS	Hartford	450-460 Capitol Ave		
DAS	Hartford	410 Capitol Ave		
DAS	Norwich	Campbell Medical Building		
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DOC	Enfield	Robinson		
DOC	Enfield	Enfield CC		

COMPETITIVE ELECTRICITY SUPPLY PROCUREMENT

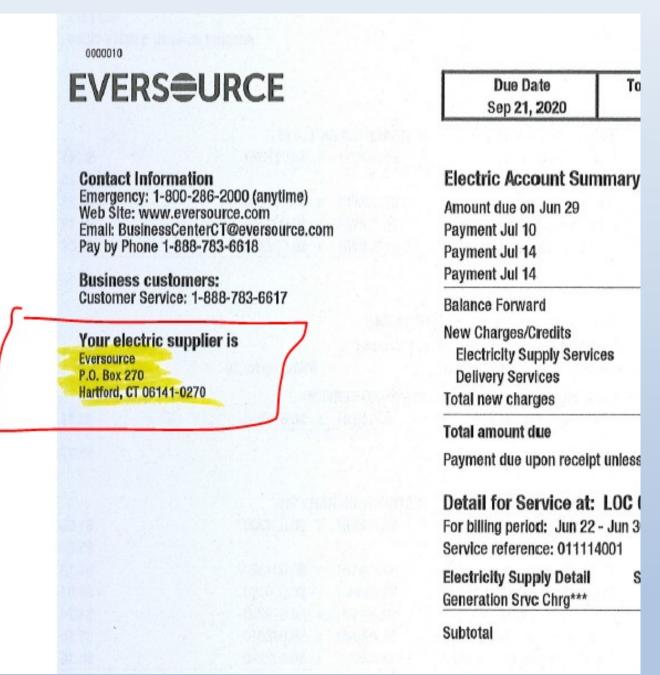


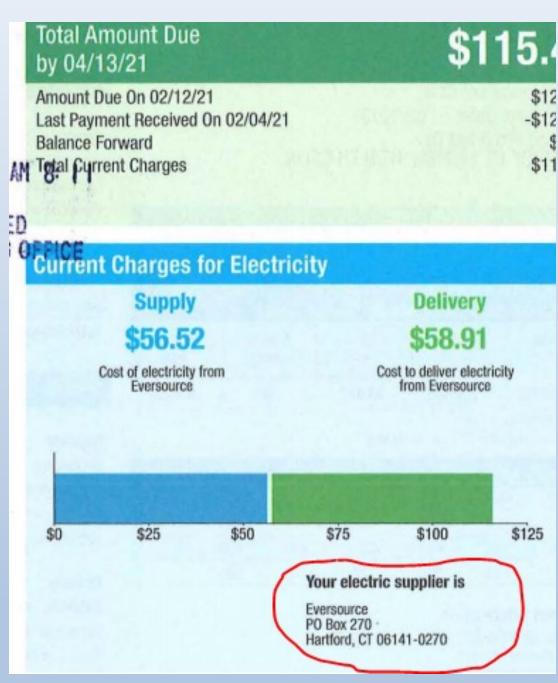
SAVING AVG. \$4 MILLION/YEAR VIA COMPETITIVE SUPPLY CONTRACT

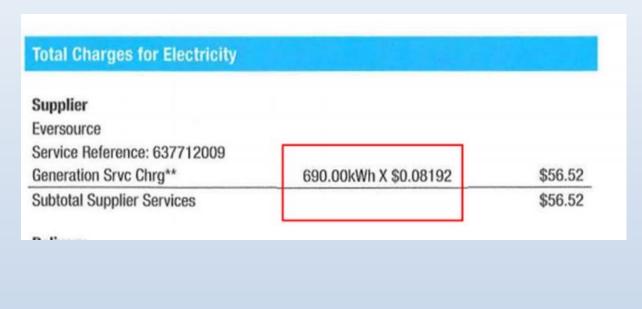


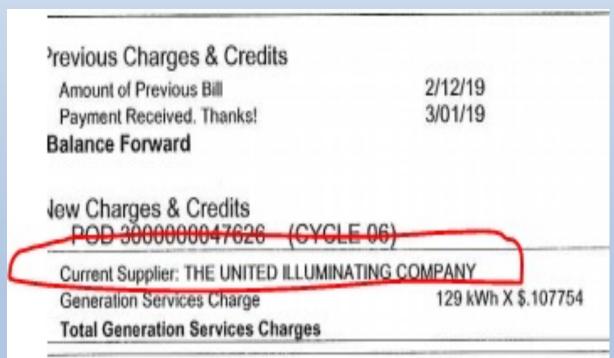


SIMPLE "FREE" SAVINGS FOR YOUR AGENCY!









• If Electric Supplier is listed as Eversource or UI, please TELL US! Email a scanned copy of the invoice (all pages) to Nancy.Dittes@ct.gov or LeadByExample@ct.gov

FIX A LEAK WEEK



FIX A LEAK WEEK

- Between the responses, 64 leaks were repaired and an estimated 405 gallons of water was saved each day.
- Department of Corrections was the largest contributor with 58 leaks fixed.
- Special mentions for participating
 - CT Lottery
 - CT Innovations
 - Department of Aging and Disability
 Services
 - Department of Transportation



NEXT STEPS

- 1. Progress Report Release, SPPs published
- 2. Recognition Ceremony planned by the Public Engagement Team
- 3. Email <u>leadbyexample@ct.gov</u> if your agency is interested in a renewable thermal study or an SBEA audit

