

Sustainability Performance Plan

FY 2021

Department of Emergency Services & Public Protection

Prepared by Willis G Ballard IV
Director of Facilities Operations
Senior Sustainability Officer

Approved by James Rovella
Commissioner

*This report was written in compliance with
section 5 of Executive Order 1.*



EO 1 Background

On April 24, 2019, Governor Lamont launched the GreenerGov CT initiative by signing Executive Order 1 (EO 1) which directs Executive Branch agencies to advance environmental leadership and cost savings for taxpayers by reducing greenhouse gas emissions and other sustainability objectives in energy use in buildings and vehicles, water use, and waste disposal.

EO 1 calls on agencies to recommit to and expand the state's Lead by Example (LBE) program to reduce the operating costs and environmental impacts of state government facilities and operations. EO 1 builds on the foundation of the state's LBE program by setting new sustainability goals, listed below, for Executive Branch agencies and invoking deeper levels of commitment and participation.

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

Since the GreenerGov CT initiative was launched, significant progress has been made towards laying the groundwork for expanded LBE initiatives in the future: governance structures were established, baseline data was collected, and financing and project strategies were developed. Additionally, agencies reported completing or making progress on 90+ sustainability projects in FY20 in the annual agency Sustainability Performance Plans. Sustainability Performance Plans are plans drafted each year by Senior Sustainability Officers to detail agency progress and necessary goals, actions, and responsible parties to achieve the targets set in EO 1.

In 2020 and 2021, agencies continued to navigate the COVID-19 pandemic. As many agencies returned to the office in 2021, the GreenerGov CT leadership encouraged agencies to use the return to the office from teleworking as an opportunity to refresh staff practices and to take on new sustainability initiatives. The FY21 Sustainability Performance Plan includes a summary of sustainability actions initiated as part of the "Returning to the Office Greener" call to action.

EO 1 Participation Overview

DESPP's Mission

The Connecticut Department of Emergency Services and Public Protection is committed to protecting and improving the quality of life for all by providing a broad range of public safety services, training, regulatory guidance and scientific services utilizing enforcement, prevention, education and state of the art science and technology. In striving to accomplish our mission, we will embody our core values with great PRIDE:

- Professionalism through an elite and diverse team of trained men and women.
- Respect for ourselves and others through our words and actions.
- Integrity through adherence to standards and values that merit public trust.
- Dedication to our colleagues, our values, and to the service of others.
- Equality through fair and unprejudiced application of the law.

FY21 Participation Overview

The purchase of 127 Hybrid Vehicles.

Participating Agency Staff

Benjamin Bartlett



Sustainability Project

including projects relating to infrastructure improvements or behavioral change that took place in owned, leased, or occupied space and were either in progress or completed in FY21

Sustainability Projects

Project 1

What: When purchasing new vehicles for replacement Hybrid vehicle purchases are considered first.

Where: Fleet

Project type: Behavioral - GHG - Vehicle/fleet

Status: In progress in FY 2021

Benefits: Less usage of gasoline to produce less greenhouse gas emissions.

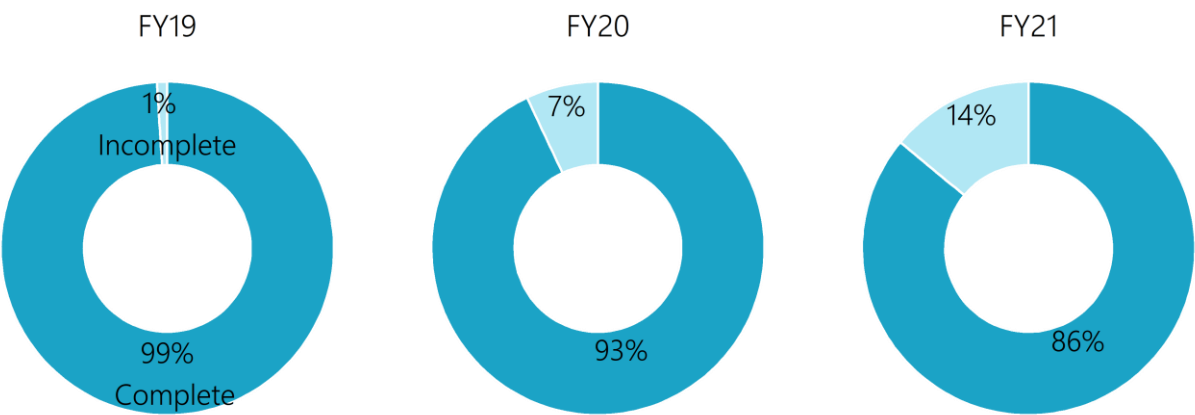
Savings: Total GHG emissions down 37.3 percent. Savings of \$954,858 from FY19-21.

Performance Data

The following data was pulled from EnergyCAP, the state’s utility tracking software, on December 9, 2021. Note that utility data on agencies occupying space owned by another state agency may not be linked to their EnergyCAP accounts.

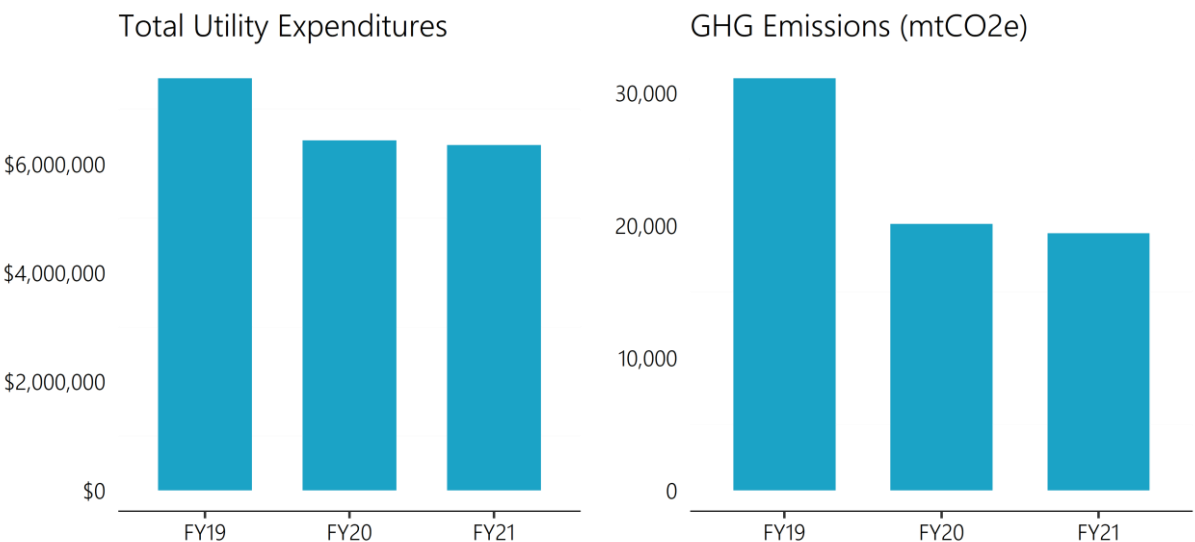
Data Completeness

The charts below display the estimated percent of utility data for DESPP entered into EnergyCAP. More recently uploaded data may still be 'in queue' awaiting processing by EnergyCAP and will not be reflected in this report.



Data Trends, FY19-FY21

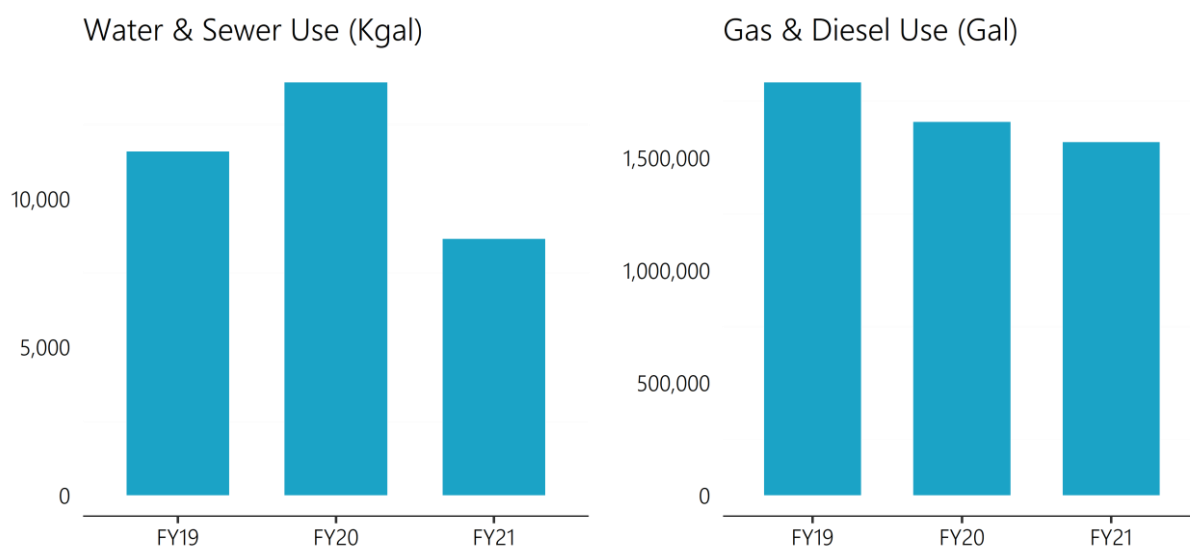
The charts below summarize the total utility expenditures and total GHG emissions for DESPP for FY19-FY21. Keep in mind that data that is missing or not yet processed in EnergyCAP may cause these numbers to be artificially low.



Performance Data cont.

Data Trends, FY19-FY21 - Continued

The charts below summarize the water and gas/diesel use for DESPP for FY19-FY21. Keep in mind that data that is missing or not yet processed in EnergyCAP may cause these numbers to be artificially low.



Detailed Utility Use and Cost Data

The table below summarizes the utility use and cost data for DESPP for FY19-FY21 according to data pulled from EnergyCAP on December 9, 2021. As mentioned previously, keep in mind that this data may be incomplete.

Commodity	Unit	Use				Cost			
		FY19	FY20	FY21	FY19-21 Change	FY19	FY20	FY21	FY19-21 Change
Electric	kWh	13,270,902	12,844,778	12,655,140	-4.6%	\$2,025,235	\$1,905,055	\$1,891,910	-6.6%
Natural Gas	CCF	121,131	106,117	105,299	-13.1%	\$117,722	\$96,673	\$103,756	-11.9%
Oil	Gal	1,082,785	168,387	173,585	-84.0%	\$387,837	\$281,472	\$302,204	-22.1%
Propane	Gal	16,869	25,913	1,511	-91.0%	\$23,511	\$29,733	\$1,805	-92.3%
Vehicle Gasoline	Gal	1,827,693	1,652,121	1,559,601	-14.7%	\$4,916,493	\$3,998,133	\$3,945,791	-19.7%
Vehicle Diesel	Gal	7,943	7,664	11,356	+43.0%	\$25,815	\$22,686	\$31,912	+23.6%
Total GHG Emissions	mtCO2e	31,111	20,126	19,426	-37.6%	-	-	-	-
Water	Kgal	6,532	8,337	5,614	-14.1%	\$44,147	\$57,456	\$41,311	-6.4%
Sewer	Kgal	5,066	5,587	3,032	-40.2%	\$34,476	\$45,196	\$29,329	-14.9%
Total	-	-	-	-	-	\$7,575,237	\$6,436,404	\$6,348,018	-16.2%

*Gasoline and diesel costs estimated based on average monthly cost from EIA.gov, \$2.53 for gasoline and \$2.81 for diesel in FY21; \$2.42 for gasoline and \$2.96 for diesel in FY20; \$2.69 for gasoline and \$3.25 for diesel in FY19.

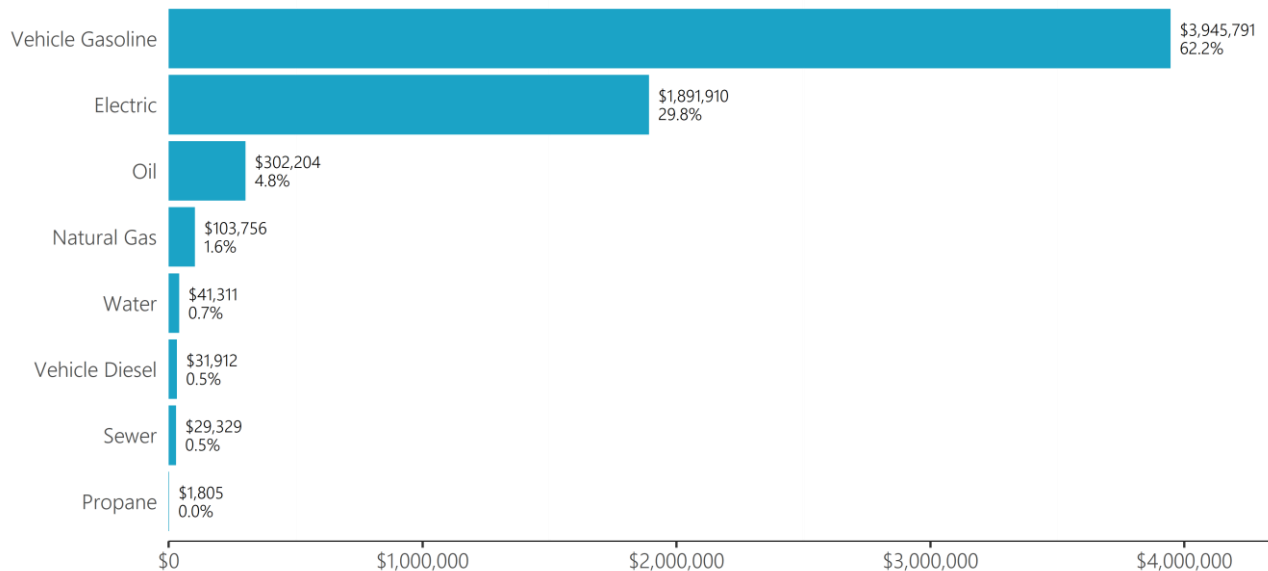
Performance Data cont.

FY21 Data Snapshot

The charts below highlight the breakdown of utility expenditures and GHG emissions by commodity for FY21.

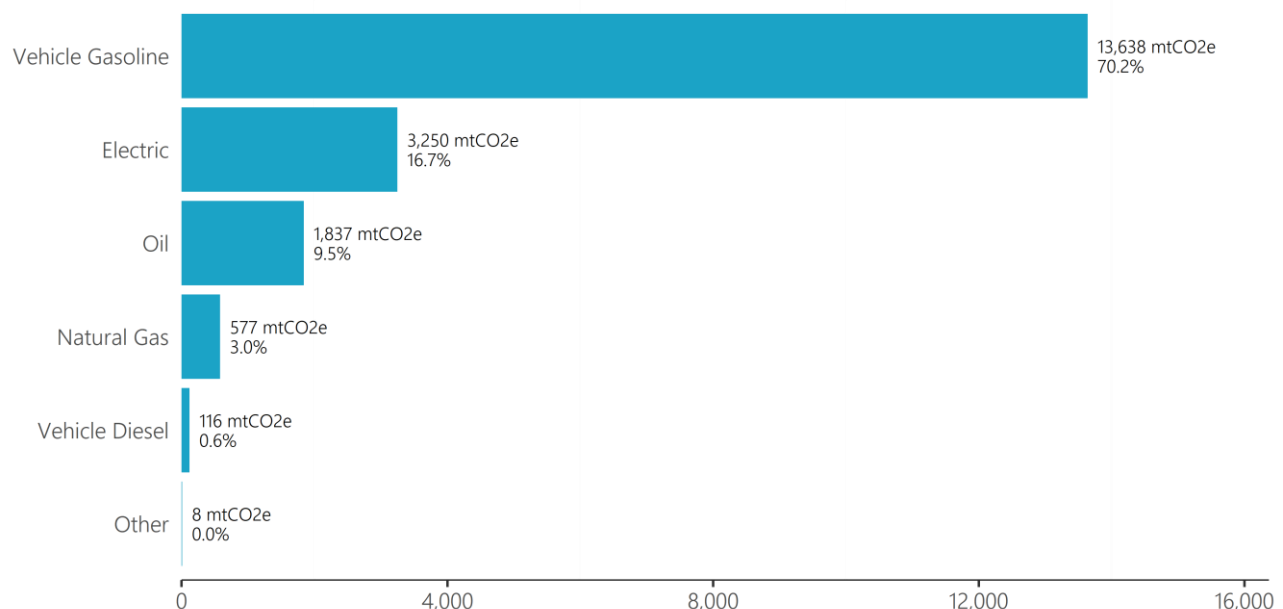
Commodity Cost Breakdown, FY21

The chart below represents the breakdown of commodity costs at DESPP in FY21.



GHG Emissions Breakdown, FY21


The chart below represents the breakdown of GHG emissions by commodity at DESPP in FY21.



Return to the Office Greener

In FY21, the GreenerGov CT leadership encouraged agencies to use the return to the office from teleworking due to the COVID-19 pandemic as an opportunity to refresh staff practices and habits and to take on new sustainability initiatives. Eleven actions were presented as possible strategies for a more sustainable return to the office, and agencies were asked to pick three actions not already in process. The actions for DESPP are highlighted below.

Returning to the Office Greener Suggested Actions

1. Identify agency vehicles which could be transitioned to electric models. 
2. Have a No-Cost retro commissioning scoping study to identify HVAC improvement and controls opportunities.
3. Sign up a building to participate in Eversource's Strategic Energy Management program.
4. Have a free building energy audit performed to identify basic opportunities to upgrade lighting or weatherization.
5. Perform a water audit to identify opportunities for fixture replacement or conservation actions.
6. Check for water leaks using the Fix-A-Leak Checklist.
7. Assess the feasibility of hosting solar on your buildings or property.
8. Optimize your dumpster size and pickup schedule.
9. Start an organics diversion/collection program.
10. Tune up recycling practices.
11. Make a Green Team of staff invested in making space and operations more sustainable.
12. Other actions

COVID-19 Impact

Impact of COVID-19 on DESPP's ability to make progress on the goals of EO 1 in FY21

Number of infections (positive Covid-19 test) lead to increased employee sick leave.

COVID-19 changes that have led to a positive sustainability outcome that will continue after the pandemic

Strategically evaluating building footprint needed for agency work	✓
Reassessing agency fleet	✓
Holding virtual meetings as a more regular practice	✓
Increased telework as a regular practice	✓
No changes to report	
Other	

Additional details on positive sustainability outcomes and how they will be continued after the pandemic

Continuance of electronic meetings and teleworking will lead to less vehicular transportation. This will save in fuel usage in State owned and personal vehicles and create less greenhouse emissions.

Future Planning

Status of FY20 Plans

	Progress has been made	Progress has stalled	Plans have been completed.	Stated plans no longer a priority	Other
GHG Reduction	✓				
Water Use Reduction					Make repairs to identified leaks as soon as possible. Monitor water usage to look for unseen leaks.
Waste Reduction	✓				

Sustainability Plans Beyond FY21

GHG Reduction

Continue with the purchasing of Hybrid vehicles. Evaluate and replace outdated HVAC equipment with energy efficient replacements.

Water Use Reduction

Replace broken toilets with new water efficient toilets.

Waste Reduction

Continue use of electronic meetings and read and sign documents. Increase in telecommuting opportunities where possible reducing # of staff in buildings.

Resources Needed

Barriers encountered while making EO 1 progress in FY21

Funding	✓
Staffing	✓
Technical expertise	✓
No barriers encountered	
Other	

Additional details on barriers encountered

With the number of retirements throughout DESPP and State Agencies overall senior level staff and institutional knowledge is diminished. Funds for major projects are needed.

Specific type of support or resources needed to make progress on future sustainability projects

Funding for HVAC, Mechanical and lighting upgrades which will reduce energy usage, replacing equipment which are past life expectancy. Contacts for steam trap studies at DESPP. Contacts for solar studies on DESPP facilities and vehicle charging stations.

Additional info on DESPP's participation in EO 1 during FY21

During 2021 retirements have increased and picked up speed going into 2022. Much of the EO1 team has retired and I am new to DESPP. I look forward to the the sustainability projects and working with this team in the future.