

Sustainability Performance Plan FY 2021

Department of Agriculture

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Approved by Bryan P. Hurlburt
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

DOAG's Mission

The Department of Agriculture will benefit the citizens of the state through proactive programs that address the issues of the changing face of agriculture. The mission of the Department of Agriculture is to foster a healthy economic, environmental and social climate for agriculture by developing, promoting and regulating agricultural businesses; protecting agricultural and aquacultural resources; enforcing laws pertaining to domestic animals; and promoting an understanding among the state's citizens of the diversity of Connecticut agriculture, its cultural heritage and its contribution to the state's economy.

FY21 Participation Overview

Though a small agency, DOAG continues to look for certain sustainability projects to help the State achieve its energy and environmental goals. In FY21, our minor contributions were focused around our energy, water and vehicle use. Due to the pandemic and employees teleworking, this has shifted our intended use. DOAG did continue to work with other agencies to look at improving our FLEET car usage. DOAG also participated in a renewable energy project through the GreenerGOVCT initiative. DOAG has been in conversations with CT Green Bank on installing solar panels on agency buildings.

Participating Agency Staff

Nathan Wilson
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Sustainability Projects

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: DOAG worked with CT Green Bank in an attempt to install solar panels at its Niantic Rescue Barn to save on electricity. Unfortunately, the location failed to CT Green Bank solar use test.

Where: DOAG Niantic Rescue Barn

Project type: Behavioral - GHG - Building energy efficiency

Status: Site failed solar use test

Benefits: DOAG would have saved hundreds of dollars a month in electrical costs.

Project 2

What: DOAG worked with CT Green Bank in an attempt to install solar panels at its Bureau of Aquaculture office located in Milford, CT. Unfortunately, the building roof was not large enough and failed to solar use test.

Where: DOAG Bureau of Aquaculture - 190 Rogers Ave Milford, CT

Project type: Behavioral - GHG - Building energy efficiency

Status: Site failed solar use test

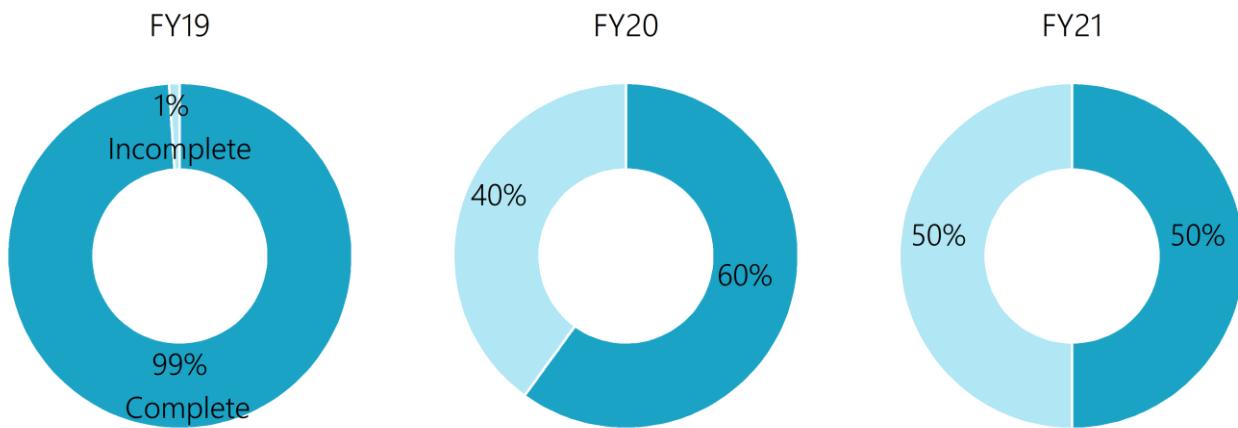
Benefits: DOAG would have saved hundreds of dollars a month on electrical costs.

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.

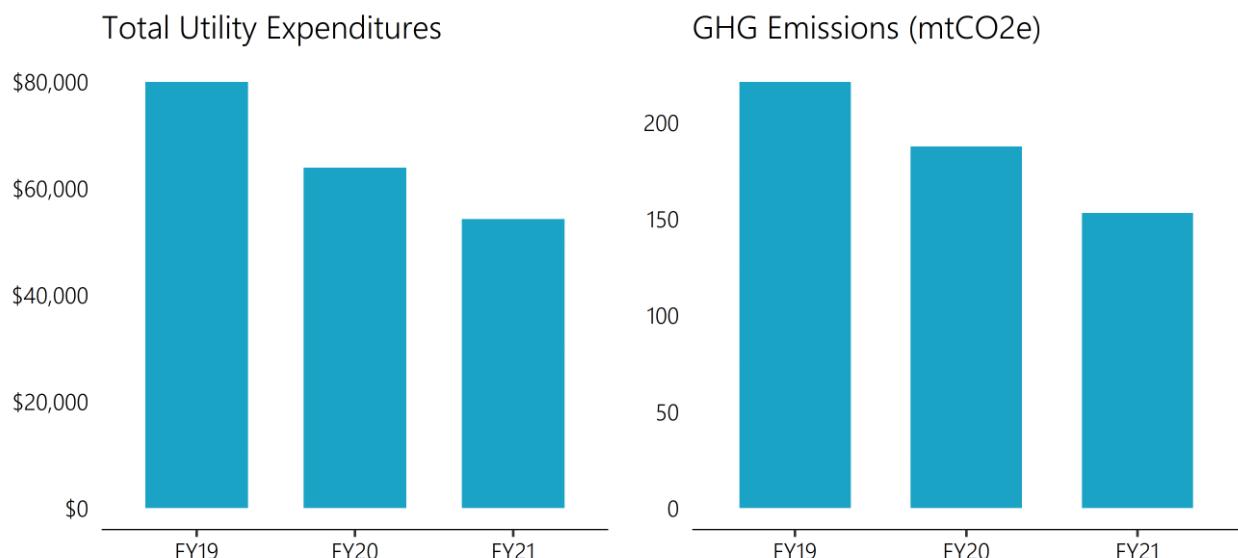
Data Completeness

The charts below display the estimated percent of utility data for DoAG 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 DoAG 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.

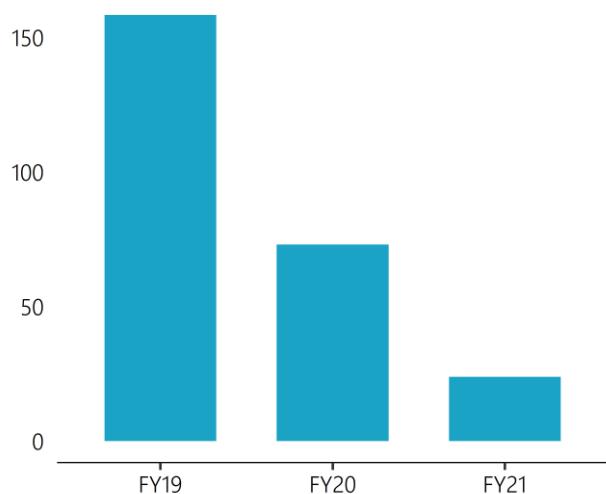


Performance Data cont.

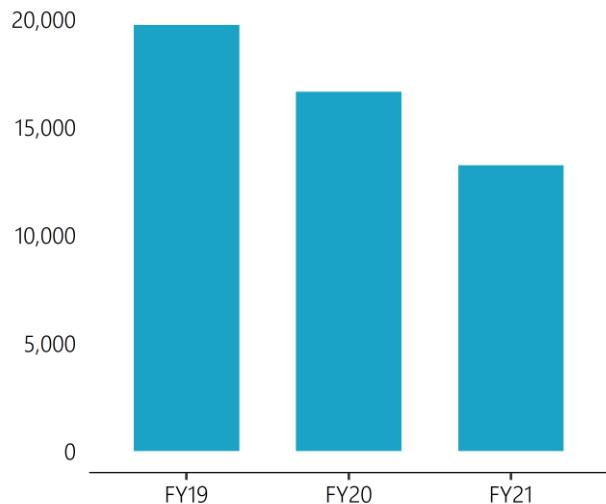
Data Trends, FY19-FY21 - Continued

The charts below summarize the water and gas/diesel use for DoAG 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.

Water & Sewer Use (Kgal)



Gas & Diesel Use (Gal)



Detailed Utility Use and Cost Data

The table below summarizes the utility use and cost data for DoAG 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			FY19-21 Change	Cost			FY19-21 Change
		FY19	FY20	FY21		FY19	FY20	FY21	
Electric	kWh	76,213	80,779	62,329	-18.2%	\$18,682	\$18,019	\$15,725	-15.8%
Natural Gas	CCF	3,493	2,971	2,894	-17.2%	\$4,507	\$3,691	\$3,671	-18.5%
Oil	Gal	1,048	741	572	-45.4%	\$2,213	\$1,236	\$944	-57.3%
Vehicle Gasoline	Gal	19,382	16,648	13,236	-31.7%	\$52,136	\$40,288	\$33,486	-35.8%
Vehicle Diesel	Gal	355	-	-	-	\$1,154	-	-	-
Total GHG Emissions	mtCO2e	221	188	153	-30.7%	-	-	-	-
Water	Kgal	158	73	24	-84.9%	\$1,240	\$625	\$415	-66.5%
Total	-	-	-	-	-	\$79,932	\$63,859	\$54,241	-32.1%

*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.

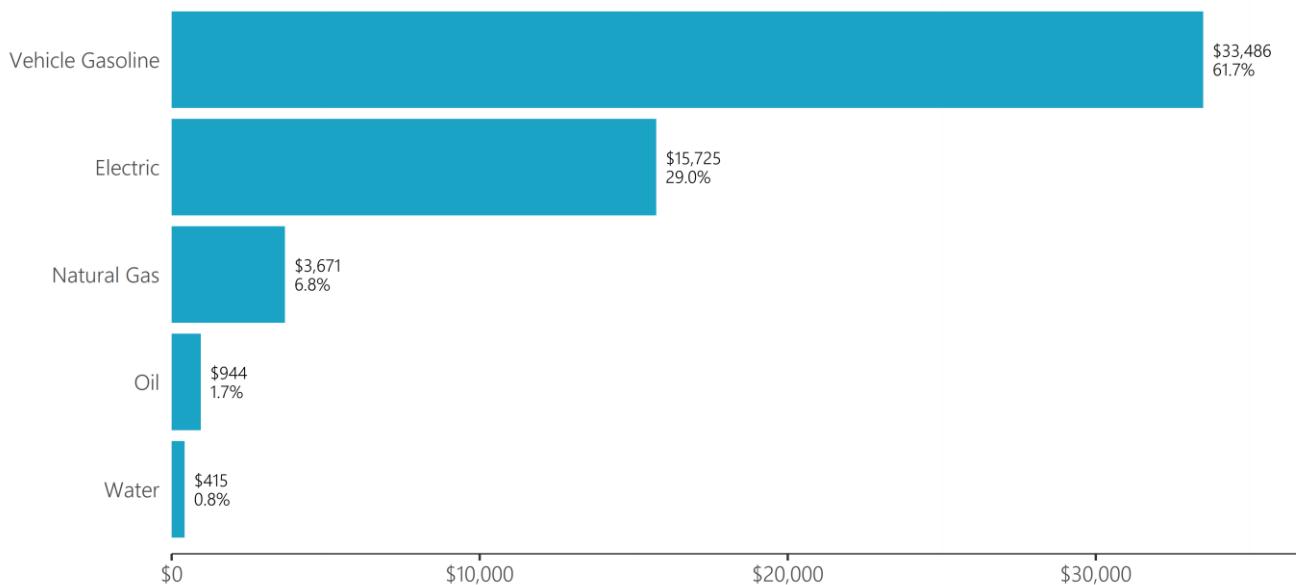
Performance Data cont.

FY21 Data Snapshot

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

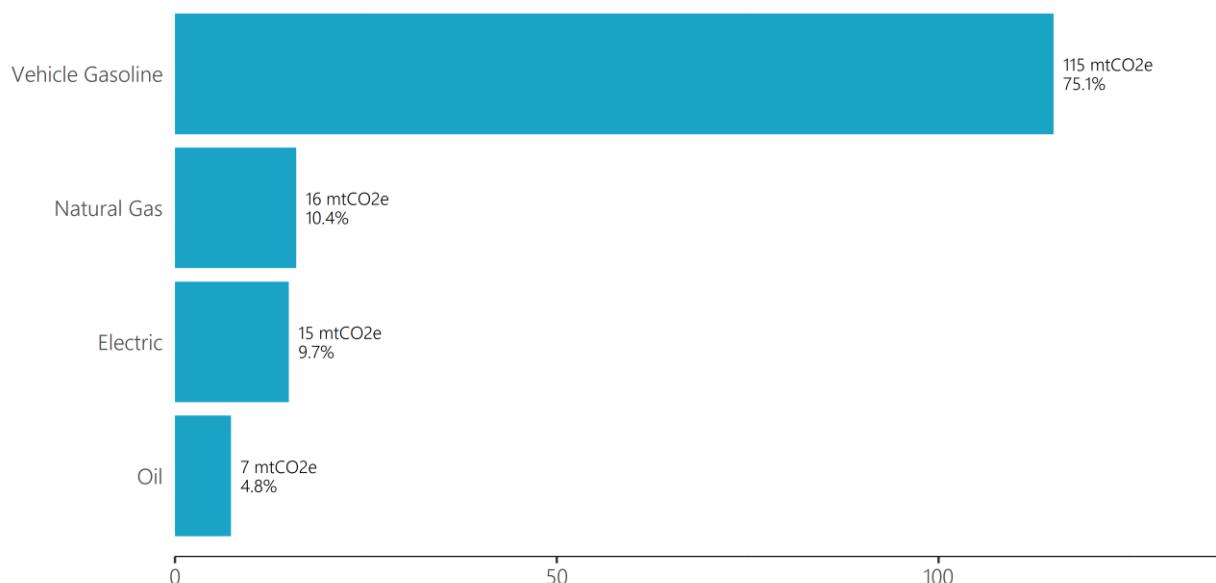
Commodity Cost Breakdown, FY21

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



GHG Emissions Breakdown, FY21

The chart below represents the breakdown of GHG emissions by commodity at DoAG 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 DOAG 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 DOAG's ability to make progress on the goals of EO 1 in FY21

Somewhat of an impact. DOAG attempted to be successful with some of the progress goals we set. The goals like solar we impacted due to reasons outside of COVID-19. But progress on water use and waste use was impacted because our staff are less at our offices.

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	

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					DOAG does not have significant water use.
Waste Reduction					DOAG does not have significant waste use.

Sustainability Plans Beyond FY21

GHG Reduction

DOAG has not made much progress on reducing its FLEET vehicles. We also have not received any new information on leasing electrical vehicles from DAS FLEET nor has our concerns about access to more charging stations around the state has been addressed.

Water Use Reduction

DOAG will continue to monitor its minimal water use at the Bureau of Aquaculture but we do not have significant use.

Waste Reduction

DOAG staff will remain teleworking from home throughout most of FY22. We will need to readjust our status as we go in to the new year.

Resources Needed

Barriers encountered while making EO 1 progress in FY21

Funding	
Staffing	✓
Technical expertise	✓
No barriers encountered	
Other	

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

More information and resources from DAS FLEET on electric vehicles.