

State of Connecticut
FY 2020

Sustainability Performance Plan

Military Department

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Approved by Brigadier General Francis J. Evon, Jr.
The Adjutant General



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 120+ sustainability projects in FY19 in the first 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, the COVID-19 pandemic brought significant changes to the operations of state agencies as agencies responded to the crisis. The impact of the pandemic on the sustainability goals of EO 1 is not yet known, but some effects will be documented in the FY20 Sustainability Performance Plans and the GreenerGov CT Progress Report.

MIL and EO 1

MIL's mission

The Military Department is a unique dual-status agency, having both federal and state missions. The federal mission is to maintain properly trained and equipped National Guard units for prompt federalization in the event of war, domestic emergencies or other emergencies. The state mission is to coordinate, support and augment federal, state and local authorities in emergency response, to provide emergency response planning and to conduct community service programs.

MIL's FY20 participation overview

The Military department has been steadfastly devoted to sustainability and working in an environmentally conscious way for many years. Staff at all levels have had a part in the EO 1 and GreenerGov CT initiative and we are poised to continue this effort through energy projects currently in design and construction.

MIL staff involvement in EO 1

Michael Carragher
Rob Dollak
Kelly Murray

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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 FY20

Sustainability Projects

1

Location: State-wide
Project Type: Structural - GHG - Building energy efficiency
Description: Retrofit of old lighting to LED.
Status: In progress in FY 2020
Benefits Summary: 75% of our facilities have been converted to LED lighting at the end of 2020.
Energy Savings: 202,185kWh

2

Location: Camp Nett
Project Type: Structural - Combination
Description: Updates and replacement of boilers and HVAC equipment. In addition, lighting was also replaced with high efficiency LED bulbs.
Status: In progress in FY 2020
Benefits Summary: Significant environmental/financial benefits will result by updating boilers, HVAC equipment, building controls, and replacing gas underground storage tanks(UST) with propane USTs.
Energy Savings: 23,322 kWh

3

Location: Groton Airport Facility
Project Type: Structural - GHG - Building energy efficiency
Description: HVAC - Repair and replacement of legacy equipment.
Status: In progress in FY 2020
Benefits Summary: Significant environmental/financial benefits will result by updating heating and cooling equipment associated with critical manufacturing areas of the plant. Upgrading building controls from a legacy system to a more modern facility control software will also provide benefits.

Performance Data

The following data was pulled from EnergyCAP, the state's utility tracking software, on March 15, 2021. Note that utility data on agencies occupying space owned by another state agency may or may not be linked to their EnergyCAP accounts.

Total Utility Costs

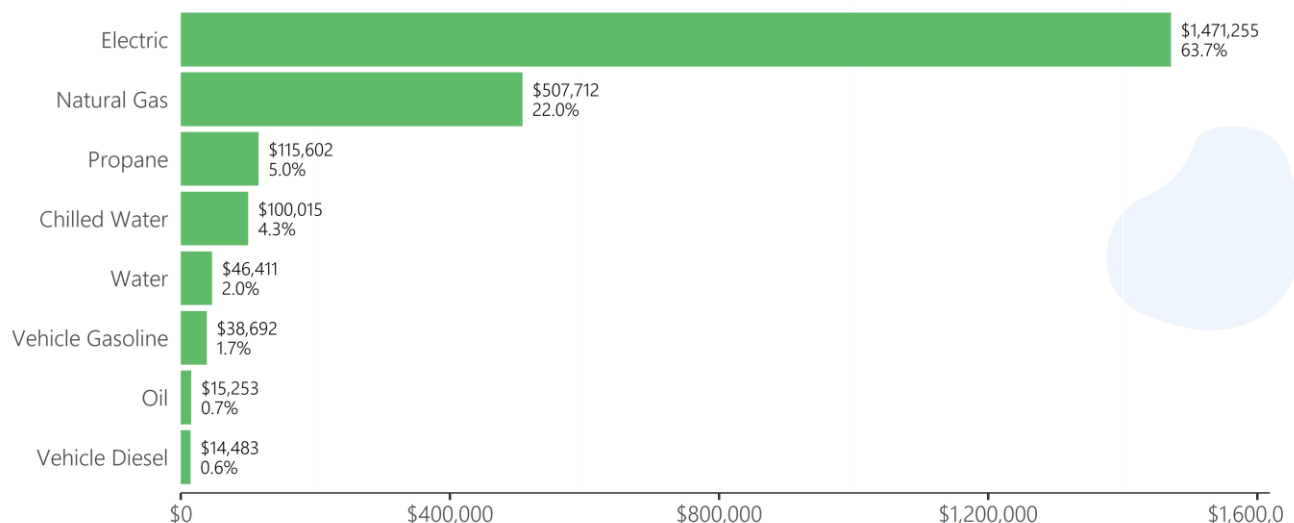
Commodity	Unit	Use			Cost		
		FY19	FY20	Change	FY19	FY20	Change
Electric & Natural Gas	MMBtu	73,908	80,440	+8.8%	\$1,881,199	\$1,978,967	+5.2%
Other Building Energy	MMBtu	9,413	11,190	+18.9%	\$220,605	\$230,871	+4.7%
Vehicle Gasoline	Gal	19,089	16,326	-14.5%	\$49,058	\$38,692	-21.1%
Vehicle Diesel	Gal	4,807	4,893	+1.8%	\$15,285	\$14,483	-5.2%
Total GHG Emissions	mtCO2e	5,486	5,937	+8.2%	-	-	-
Water	Kgal	3,873	4,632	+19.6%	\$25,808	\$46,411	+79.8%
Total	-	-	-	-	\$2,191,955	\$2,309,424	+5.4%

*Gasoline and diesel costs estimated based on average weekly cost from EIA.gov, \$2.37 for gasoline and \$2.96 for diesel in FY20 and \$2.57 for gasoline and \$3.18 for diesel in FY19.

**Other Building Energy sources include oil, propane, steam, and chilled water.

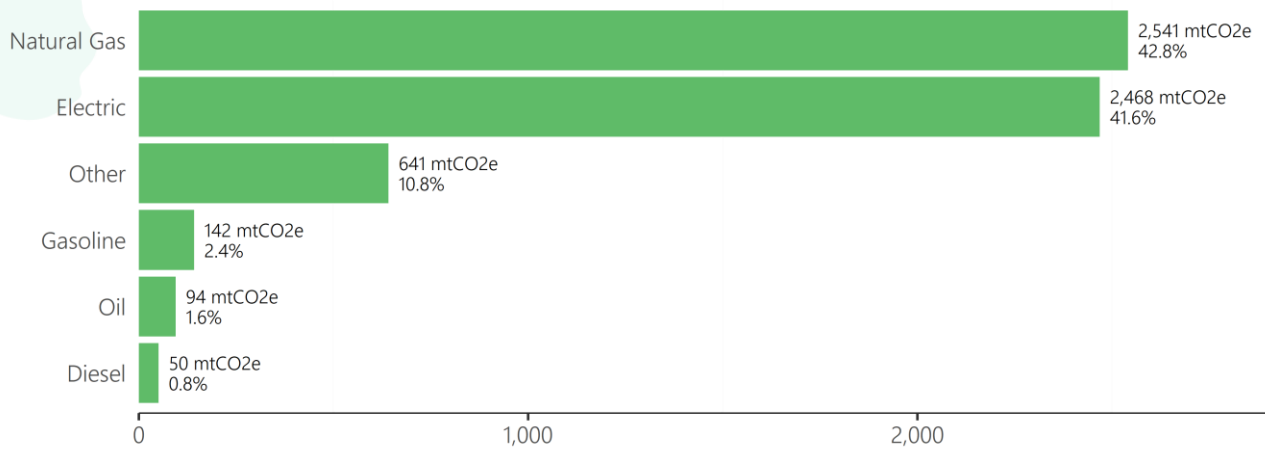
Commodity Cost Breakdown, FY20

The chart below represents the breakdown of commodity costs at MIL in FY20.



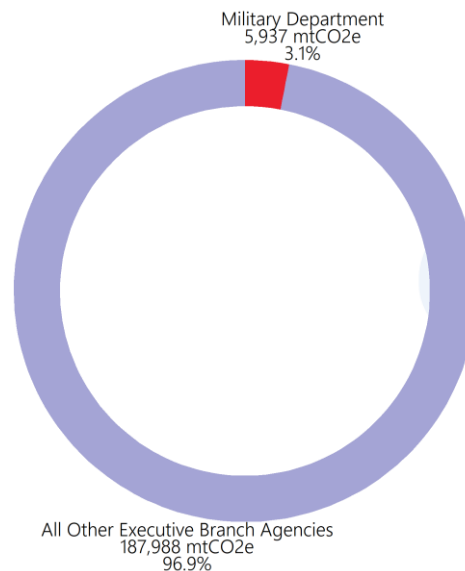
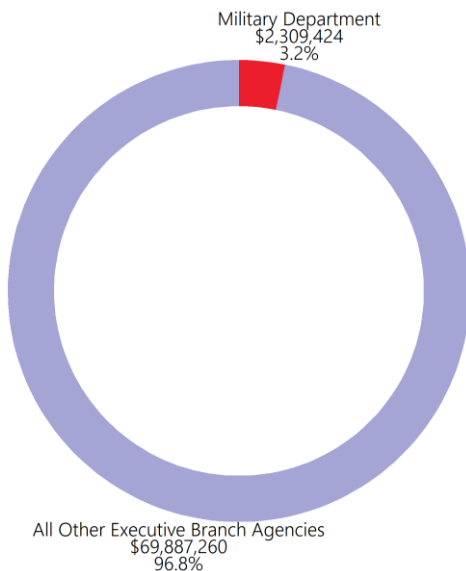
GHG Emissions Breakdown, FY20

The chart below represents the breakdown of GHG emissions by commodity at MIL in FY20.



Share of Utility Costs and GHG Emissions

The two charts below display MIL's proportion of the FY20 total utility cost and the total GHG emissions of all agencies participating in EO 1.



Future Planning

GHG Reduction (energy/fleet related)

Status of FY19 Plans

- ✓ **Progress has been made.**
 Progress has stalled.
 Plans have been completed.
 Stated plans no longer a priority.

Planned FY21 Projects

The Military Department will continue several projects currently in design and/or construction that will replace aging oil-fired boilers, upgrade existing HVAC equipment, and implement new building control systems.

Water Use Reduction

Status of FY19 Plans

- ✓ **Progress has been made.**
 Progress has stalled.
 Plans have been completed.
 Stated plans no longer a priority.

Planned FY21 Projects

No plans reported.

Waste Reduction

Status of FY19 Plans

Although no specific waste reduction plan was completed recently the CT Military Department works on reducing waste generated on a continuous basis. Numerous process changes and waste reduction efforts have been conducted over the past several years and in cooperation with the National Guard Bureau who has funded the majority of these efforts.

Planned FY21 Projects

The CT Military Department is taking every opportunity to move towards digital data handling wherever feasible to reduce the use and waste of paper. We have installed recycling receptacles in all of our facilities and ensure that maximum volume eligible waste is diverted to be recycled.

COVID-19 Impacts

Impact of COVID-19 on agency's ability to make progress on the goals of EO 1 in FY20

The CT Army & Air National Guard has activated a large number of Soldiers and Airmen in order to support the State response to the COVID-19 pandemic which has increased usage in our facilities and of our vehicle fleet around the State. With the increase in usage at facilities and vehicles the agency will show an increase to the utilities associated to those areas and will have an adverse effect on the agency's ability to meet the EO 1 goals this year and into 2021.

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

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

The agency has used virtual meetings and increased telework as much as possible over the last year. Telework and virtual collaboration will most likely continue in the future in some capacity of what it is now.

Resources Needed

Barriers encountered while making EO 1 progress in FY20

✓ **Funding**

✓ **Staffing**

Technical expertise

No barriers encountered

✓ **Other: The State Military Department is primarily a federally funded agency, due to the COVID-19 pandemic the funding for developing sustainability projects is very limited.**

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

Additional state funding for staffing and development of sustainability projects would be needed to match the federal funding in order to continue to maintain our facilities and pursue additional energy projects to meet EO 1.