State of Connecticut FY 2020

Sustainability Performance Plan

Department of Correction

Prepared by Stephen Link Senior Sustainability Officer

Approved by Angel Quiros
Commissioner



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.

DOC and EO 1

DOC's mission

Since 1968 the Connecticut Department of Correction has proudly served and protected the citizens of the State of Connecticut by daily ensuring the safety, security and order of our 14 correctional facilities in a manner which is widely viewed as a national model. The Department endeavors to provide the programming, education and treatment, which willing inmates may utilize to improve themselves and the success of their eventual reintegration into society. Our staff of dedicated correctional professionals takes great PRIDE (Professionalism, Respect, Integrity, Dignity, Excellence) in the daily performance of their duty to our state.

DOC's FY20 participation overview

The Department of Correction has embraced EO-1 and Greener Gov CT initiative by actively participating in effort across the department. We have agency staff members participating on three Impact Teams

DOC staff involvement in EO 1

Stephen Link

Agency State Sustainability Officer & Team Leader of Renewable Energy

Rich Pease

Team Leader for Sustainable Materials Management

Chris Iwanik

Sustainable Water Use Team member

Tom Levesque

Energy Efficiency Team member

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 FY20

Sustainability Projects

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Location: Osborn C.I. 335 Bilton Rd. Somers, CT 06071

Project Type: Structural - GHG - Building energy efficiency

Description: Conversion of the interior and exterior facility lighting to LED

Status: In progress in FY 2020

Benefits Summary: Reduced maintenance, energy consumption and improved visibility inside and

outside.

Energy Savings: This project is estimated to save 18,823,805 kWh over the life of the measures

which is equivalent to: 8,141,384 pounds of coal not burned, or 669,249 gallons of

oil not burned, or providing 2,241 Homes with electricity for one year.

Cost Savings: The project is estimated to save \$193,512 per year in electrical costs.

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.

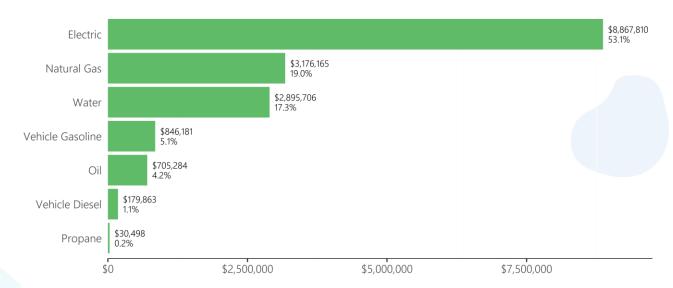
Total Utility Costs

Commodity	Unit	Use			Cost		
		FY19	FY20	Change	FY19	FY20	Change
Electric & Natural Gas	MMBtu	646,259	627,515	-2.9%	\$13,144,856	\$12,043,975	-8.4%
Other Building Energy	MMBtu	65,833	59,821	-9.1%	\$984,178	\$735,782	-25.2%
Vehicle Gasoline	Gal	398,218	357,038	-10.3%	\$1,023,419	\$846,181	-17.3%
Vehicle Diesel	Gal	28,744	60,764	+111.4%	\$91,406	\$179,863	+96.8%
Total GHG Emissions	mtCO2e	47,839	46,017	-3.8%	-	-	-
Water	Kgal	3,360,294	512,639	-84.7%	\$3,386,712	\$2,895,706	-14.5%
Total	-	-	-	-	\$18,630,572	\$16,701,507	-10.4%

^{*}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.

Commodity Cost Breakdown, FY20

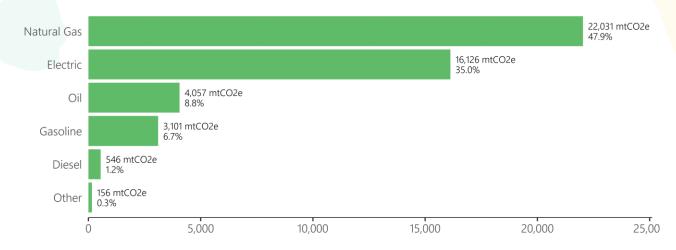
The chart below represents the breakdown of commodity costs at DOC in FY20.



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

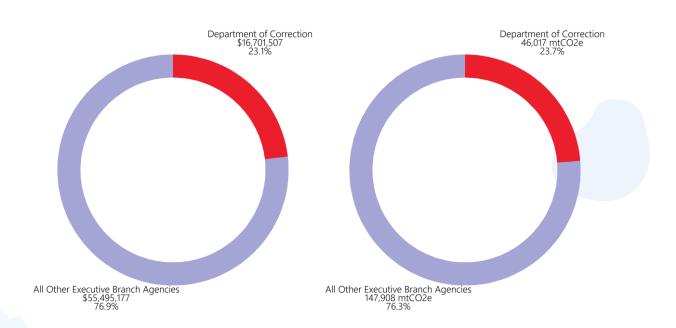
GHG Emissions Breakdown, FY20

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



Share of Utility Costs and GHG Emissions

The two charts below display DOC'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

LED retrofit in MacDougall/Walker and Northern CI. Energy Management System replacement and upgrade in MacDougall/Walker CI Installation of 13 megawatts of ground mounted solar PV in Somers and Cheshire.

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

Water conservation controls and fixture upgrade in MacDougall/Walker and Osborn CI

Waste 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

Working on plan to divert food from waste stream.

COVID-19 Impacts

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

The pandemic stalled all projects including EO-1 efforts in all DOC facilities. Due to the congregate settings of the facilities, entrance to the DOC facilities was severely curtailed to protect the inmate populations from COVID-19. This is why we were only able to initiate one project in 2020.

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

Continued use of virtual meeting to reduce the need to travel to meetings

Resources Needed

Barriers encountered while making EO 1 progress in FY20

Funding Staffing Technical expertise

✓ No barriers encountered Other

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

The end of the pandemic will allow more non-emergency/critical access to DOC facilities giving us the ability to initiate planned projects.