Sustainability Performance Plan

FY 2023

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



Sustainability Performance Plan

Executive Order 1 (EO 1) calls on 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.

The goals of EO 1 include:

- 45% reduction in GHG emissions below 2001 levels,
- 10% reduction in water consumption from a FY20 baseline, and
- 25% reduction in waste disposal from a FY20 baseline.

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.

This report includes details on sustainability initiatives and participation in the GreenerGovCT initiative in FY23.

Agency Details

Agency: Department of Energy and Environmental Protection

Senior Sustainability Officer: Dennis Thibodeau and Robert Girard

Date Submitted: 1/15/2024

GreenerGov CT Participation Overview

1. How has your agency worked towards the sustainability goals of EO 1 in FY23?

As a chairing agency, DEEP participates in almost every facet of this initiative. In addition to chairing the steering committee and running monthly meetings, DEEP staff are on each one of the nine project teams. Dennis Thibodeau and Robert Girard serve as DEEP's SSOs with Paula McDowell and Nathania Santiago as contact persons for EnergyCAP data collection. Lastly, four DEEP staff serve as EnergyCAP liaisons to all agencies with state building and fleet data.

2. List key agency staff involved in EO 1 in FY23.

Katie Dykes

Hank Webster

Annie Decker

Victoria Hackett

Mason Trumble

Tracy Babbidge

Andrew Hoskins

Dennis Thibodeau

Robert Girard

David Johnson

Paul Farrell

Ashley Marshall

Jennifer Weymouth

Doug Hoskins

Connie Mendolia

Andrea Lane

Dave Cooley

Mary French

Paula McDowell

Nathania Santiago

Sustainability Projects

3. How many projects has your agency implemented that had a positive impact on sustainability in FY23? Include projects relating to infrastructure improvements as well as behavioral change that took place in owned, leased, or occupied space and were either in progress or completed in FY23.

In FY23 DEEP continued to construct its new Net Zero Energy Western District Headquarters facility, pursued replacing the #2 oil fired furnaces at the DEEP Portland Complex administration building with energy efficient heat pumps, and completed the modernization of the recirculation system at the Quinebaug Valley Trout Hatchery.

- 4. Provide a summary of the sustainability projects completed in FY23 at your agency. For each project include:
 - a. Project summary
 - b. Project location
 - c. Project status
 - d. Project benefits
 - e. Projected savings (in dollars and the appropriate unit of measurement if known)

Project summary: DEEP constructed a modern recirculation system at its Quinebaug Valley Trout Hatchery that will significantly reduce overall water usage. Previously, the facility consumed approximately 3,600 gallons per minute provided by onsite wells. The new recirculation system will reduce water consumption by more than 30% by incorporating drum filtration and ultraviolet disinfectioninto the hatchery's operations. This new system will reduce the potetial to spread disease and increase water quality in the hatchery's 50ft diameter production ponds.

Project location: 141 Trout Hatchery Road, Central Village, CT

Project status: Completed

Project benefits:: Lower energy energy and water consumption, and lower operation and maintenance

costs.

Project summary: Optimizing DEEP's facilities footprint – 10% reduction in building square footage by

2030.

DEEP manages and maintains a wide variety of buildings. In 2019 DEEP's 1,006 buildings collectively amounted to approximately 1,692,164 of gross square footage. Strategically merging facilities and operations and properly disposing of unnecessary building space results in lower energy and water consumption, and lower operation and maintenance costs.

Using asset management software and the National Park Service's asset priority index (API) methodology, DEEP evaluates each of its buildings to determine their importance and priority in supporting the agency's mission. Asset management software that contains key information such as building condition, efficiency, location, and utilization is used to help inform the agency's decisions on what buildings are worth maintaining and investing in, and what buildings should be disposed of. Recognizing that all buildings consume energy and numerous resources, rightsizing DEEP's facilities footprint is a critical piece of its strategy for achieving sustainability.

The API scoring provides a quantitative means to determine which buildings are mission critical and which aren't and should be properly disposed of. This data in now being used to assist DEEP with properly prioritizing proposed construction and maintenance projects. In FY23 DEEP implemented a scoring system that uses the API and other key criteria to score facility improvement and maintenance project concepts that have been forwared by facility supervisors and program managers for consideration. The scoring system is used to identify the agency's highest priority needs and recommends what projects should be pursued, with supporting justification. DEEP ended FY2023 with 940 structures with a, approximated gross square footage of 1,320,095

DEEP has also leveraged its newly adopted Asset Management Program to demonstrate the agency's data driven and sustainable approach to pursuing facility improvement and maintenance projects, when seeking necessary funding.

Project location: Agency-wide **Project Status:** In progress

Project Benefits: Lower energy and water consumption, and lower operation and maintenance costs.

Project Summary: In FY23 DEEP continued to construct its new Net Zero Energy Western District Headquarters Facility. DEEP plans to consolidate operations spread across its Western District through the construction of a LEED v4 platinum rated, Net Zero Energy, Western District Headquarters. This facility will replace 9 buildings located in 5 separate towns and will save energy, money and increase business efficiency.

Project location: 2065 Thomaston Road, Watertown, CT

Project Status: Under construction

Project Benefits: Lower energy and water consumption, lower operation and maintenance costs, and

increased business efficiency.

Project Summary: DEEP will replace the 3 oil fired furnaces at the Portland Complex administrative

building with energy efficient heat pumps.

Project location: 263 Great Hill Road, Portland, CT

Project Status: In procurement

Project Benefits: Lower energy consumption, lower operation and maintenance costs, and reduced air

emissions.

Future Plans

5. What planned sustainability initiatives beyond FY23 does your agency have relating to GHG reduction, water use reduction, and waste reduction?

Solar Photovoltaic Installations: DEEP is proceeding with solar photovoltaic installations at the Kensington and Quinebaug Fish Hatcheries, and the Marine District Headquarters facility.

Transitioning Away From Fossil Fuel Heating Sources: DEEP will replace the #2 oil fired steam heating system at the Harkness State Park Carriage House with energy efficient heat pumps.

Vehicle Fleet Optimization: DEEP is using asset management software to promote more efficient vehicle use through regionalized motor pools resulting in fewer miles traveled, fewer vehicles and improved opportunity for expanding the number of electric vehicle (EV) charging stations and the EV fleet. Older vehicles are being replaced with the most fuel-efficient options and where possible EVs and other low emission vehicles are being purchased.

DEEP plans to equip all of its motor vehciles and some large equipment with telematics systems so critical vehicle and equipment use data can be collected and used to make better informed purchasing decisions and increase the use of its vehicle motor pools and other equipment sharing opportunities. DEEP continues to pursue increasing the capacity of its vehicle charging infrastructure.