

Sustainability Performance Plan

FY 2022

*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 FY22.

Agency Details

Agency: Department of Energy and Environmental Protection

Senior Sustainability Officer: Dennis Thibodeau and Robert Girard

Date Submitted: 2/20/2023

GreenerGov CT Participation Overview

1. How has your agency worked towards the sustainability goals of EO 1 in FY22?

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 FY22.

Katie Dykes

Victoria Hackett

Mason Trumble

Tracy Babbidge
Andrew Hoskins
Dennis Thibodeau
Robert Girard
David Johnson
Paul Farrell
Kirsten Rigney
Ryan Ensling
Jennifer Weymouth
Doug Hoskins
Connie Mendolia
Kyle Ellsworth
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 FY22? 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 FY22.

In FY22 DEEP replaced the Dinosaur State Park Exhibit Center Building's antiquated and inefficient HVAC system with an energy efficient system. DEEP also broke ground on its new Net Zero Energy Western District Headquarters facility and the modernization of the recirculation system at the Quinebaug Valley Trout Hatchery.

4. Provide a summary of the sustainability projects completed in FY22 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: Dinosaur State Park Exhibit Center Building HVAC Upgrades - antiquated and inefficient heating HVAC system was replaced with an energy efficient system.

Project location: 400 West Street, Rocky Hill, CT

Project status: Complete

Project Benefits: Reduced energy consumption, operating costs, and air and GHG emissions

Project summary: DEEP is constructing a modern recirculation system at its Quinebaug Valley Trout Hatchery that will significantly reduce overall water usage. The facility currently consumes approximately 3,600 gallons per minute provided by onsite wells. The planned recirculation system will reduce water consumption by more than 30% by incorporating drum filtration and ultraviolet disinfection into the hatchery's operations. This new system will reduce the potential 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: Under construction

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 that collectively amount to approximately 1,692,164 of gross square footage. Strategically merging facilities and operations and properly disposing of unnecessary building space will result 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 will evaluate 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 will be 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.

In FY 2021 facility managers and DEEP engineering staff completed API evaluations for all of DEEP's 1,006 buildings at its 98 locations. The complete portfolio of 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 is now being used to assist DEEP with properly prioritizing proposed construction and maintenance projects for FY 2022 and beyond.

In FY22 a group of DEEP staff, the "Project Request Team," developed and implemented a scoring system that uses the API and other key criteria to score facility improvement and maintenance project concepts that have been forwarded by program managers for consideration.

The Project Request Team uses the scoring system to identify the agency's highest priority needs and recommends what projects should be pursued, with supporting justification.

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 FY22 DEEP broke ground on a 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.

Future Plans

5. What planned sustainability initiatives beyond FY22 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.

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 vehicles 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.