STEERING COMMITTEE ON STATE SUSTAINABILITY

NOVEMBER 8, 2019

GINA MCCARTHY AUDITORIUM

greenergov CT

A Lead by Example Initiative

AGENDA

Welcome and Timeline Review (10 mins) Report back from Project Teams (20 mins) Next Steps Before December (5 mins)

Sustainability Performance Plans (25 mins) State Materials Management Overview (25 mins)

greenergovCT

A Lead by Example Initiative





TIMELINE REVIEW







_	TO-DO'S	April 2019	June 2019	Aug 2019	Oct 2019	Dec 2019	Feb 2020	Apr 2020	June 2020	
	Baseline Data Collection		Level	1	Level	2	Level 3			
	SSOs Prepare Sustainability Performance Plans						4	Due Date		
	Co-Chairs Prepare Progress Repo		<	Due Da	ate					
	Project Teams Develop Initial Sustainability Strategies									
	Agencies Implement Sustainability Strategies									
_										



SUSTAINABILITY PERFORMANCE PLANS

SPP TIMELINE



November 8 Meeting

Sustainability Perfomance Plan drafts are introduced and walked through.

SSOs begin brainstroming future planning section and delegate report preparation as needed.



December 6 Meeting

Sustainability Performance Plans are released to SSOs with fillable sections to complete.



January 24 Deadline

Completed and signed Sustainability Performance Plans are submitted to leadbyexample@ct.gov.

OVERVIEW



Sustainability Performance Plan

Agency Name Here

 Greener gov CT

A plan that "lists the necessary actions, milestones, and responsible parties to achieve the sustainability goals and targets established by this Order, as well as the progress on achieving such goals and targets."

7 Sections

Approvals EO 1 Background Intro to Your Agency Data Collection Progress Perfomance Data Sustainability Projects Future Planning

11 Pages

1 Signature Page

5 Pages for SSO to fill out

5 Pages are pre-populated

REPORT SHARING



What will this report be used for?

- Contribute to the statewide annual report created by the Steering Committee
- Serve as tool for Commissioner to assess an agency's progress and needs
- Be published on the GreenerGovCT website to educate the public on the state's sustainability efforts.

APPROVALS



Update your commissioner

The SPP is and commissioner towards meeti Executive Orde should sign of

SIGNATURE PAGE

- The SPP is an opportunity to update your
- commissioner on your agency's progress
- towards meeting the goals outlined in
- Executive Order 1. The SSO and commissioner
- should sign off on the completed report.

EO 1 BACKGROUND

03

Brief EO 1 Background

Since Ned Lamont released Executive Order 1 (EO 1) on April 24, 2019, which directed state agencies to reduce their environmental footprint, immense planning, mobilization, and planning has taken place.

Currently, we are just over halfway to completing the complete data collection process. In addition, project teams are underway developing the suite of sustainability strategies and guidance to help state agencies achieve the three environmental targets set forth in EO 1.

GHG WATER 45% reduction in GHG emissions water consumption below 2001 levels from a FY20 baseline

WASTE 25% reduction in waste disposal from line a FY20 baseline

These Sustainability Performance Plans will be developed and released annually by SSOs and will detail agency progress and necessary goals, actions, and responsible parties to achieve the targets set in EO 1. This plan will evolve next year once all baseline data has been collected and agencies are encouraged to begin implementing sustainability strategies.



Introducing Executive Order 1

This page prov EO 1 and when page to introd

PRE-POPULATED PAGE

- This page provides a high-level overview of
- EO 1 and where we are in the timeline. Use this
- page to introduce EO 1 to your commissioner.

AGENCY INTRO

04

Intro to DEEP and EO 1

In this section, please describe your agency's mission.

At sed dicit dolore consulatu, in vero vivendum nec. Est malis partiendo dissentiunt eu, animal oporteat suscipiantur eu vel. Ex cum tibique deleniti invidunt. Altera repudiandae ex eos, ex paulo scripta ius. At has modo delicata, in nec commune liberavisse.

At sed dicit dolore consulatu, in vero vivendum nec. Est malis partiendo dissentiunt eu, animal oporteat susciplantur eu vel. Ex cum tibique deleniti invidunt. Altera repudiandae ex eos, ex paulo scripta jus. At has modo delicata, in nec commune liberavisse.

Please briefly describe how your agency has been participating in the joint EO 1 and Greener Gov CT initiative.

mea consul adolescens, eos et magna sonet soluta. Equidem impedit copiosae nec at, pro te mentitum rationibus argumentum. Cu putant virtute salutatus vis. Vel audiam vocibus convenire in. Legere probatus eloquentiam in vix, stet impetus his no.

Please list any key staff involved in EO 1.

Dennis Thibodeau, SSO Mary Sotos Jenn Weymouth Connie Mendolia Kyle Elisworth Rose Croog

Eric Ott, Building Inventory Contact Paula McDowell, Invoice Uploader Doug Hoskins Nicole Lugli Keri Enright-Kata Nancy Dittes Gabrielle Frigon

EEP SUSTAINABILITY PERFORMANCE PLAN

Introduce your agency

FILLABLE PAGE

- Provide a summary of your agency's mission,
- and give a brief overview of how your agency
- was involved with Executive Order 1 in FY19.



DATA COLLECTION PROGRESS

06

Energy CAP agencies ONLY

Data Collection Progress

This section summarizes your agency's progress in meeting the data collection milestones for Executive Order 1. Levels 1, 2, and 3 refer to progress in reporting utility data through the state utility tracking software, EnergyCAP. Agencies that do not report utility bills via EnergyCAP are not included in Level 1, 2, or 3.

Since EO 1 was released this past April 2019, utility data collection has been ongoing in order to establish baselines. This makes the data collection an important piece of this years reporting. In future years, data collection will not be as emphasized.

LEVEL 1 DUE SEP 2019

- Designate an individual (via survey) to serve as the accounts contact at your agency responsible for scanning and uploading invoices into EnergyCAP/BillCapture
- itiate contact with your personal EnergyCAP liaison
- iew invoice scanning guidelines and instructional materials and request in-person ergyCAP training session(s), as needed
- Upload new invoices into EnergyCAP/BillCAPture as your agency receives them

LEVEL 2 DUE DEC 2019

- Designate an individual (via survey) to serve as the facilities contact at your agency responsible for updating your agency's Building Inventory Sheet
- onfirm the accuracy of the Building Inventory Sheet based on your agency's inventory accounts, buildings, and meters
- date the Building Inventory Sheet to reflect accurate building name, address, square tage, building type, and space-use attributes
- Match all utility meters to their proper buildings, verify all meters have been documented for each building, and identify unmetered accounts

LEVEL 3 DUE APR 2019

Upload historical invoices for building utilities including electricity, gas, propane, fuel oil, water, and sewer into EnergyCAP/BillCAPture starting with January 1, 2018

DOC SUSTAINABILITY PERFORMANCE PLAN

Gathering the baseline data

collection milestones.

PRE-POPULATED PAGE

- Much work has been done to collect the data
- necessary to benchmark progress towards the
- EO 1 goals. This page will summarize your
- agency's progress in meeting the data

PERFORMANCE DATA



PRE-POPULATED PAGE

Summarizing the data collected so far

For agencies with data in EnergyCAP, a summary of energy, fuel, and water use will be provided based on the data collected so far.

SUSTAINABILITY PROJECTS

09

Sustainability Projects

How many projects has your agency implemented that had a positive impact on sustainability and were either in progress or completed in FY2019? Include projects relating to infrastructure improvements as well as behavioral change that took place in owned, leased, or occupied space.

5

Please provide more detail on up to **three** of your agency's FY2019 projects below and on the next page.

Project Location/Leasing Structure: Hammonasset State Park Type of project: Energy Use Agencies Involved: DEEP

Brief description: DEEP is strategically electrifying 80% of it's park equipment Implementation Status and Timeline In progress, scheduled for completion Feb 2020 Realized or Anticipated Benefits Will divert roughly 100 gallons of fuel annually and save \$33,000.

Project Location/Leasing Structure: 79 Elm St Type of project: Waste Reduction Agencies Involved: DEEP

Brief description
DEEP implemented an 1T solution that automatically sets printers to double-sided as a default
Implementation Status and Timeline
Complete February 2019
Realized or Anticipated Benefits
DEEP has saved roughly 400 reams of paper

DEEP SUSTAINABILITY PERFORMANCE PLAN

Sustainability Projects 🛲

Project Location/Leasing Structure: 79 Elm Street Type of project: Fleet Agencies Involved: DEEP

Brief description

DEEP recently installed electric vehicle charging stations at 79 elm after conducting an employee survey on electric vehicle use and charging needs Implementation Status and Timeline Complete May 2019 Realized or Anticipated Benefits DEEP has encouraged employee electric vehicle use and begun to build out infrastructure for a broader EV fleet.

What barriers has your agency encountered while making progress on EO 1 in FY2019?

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Quidam graecis democritum ius no, usu convenire democritum ea, usu iusto vocent comprehensam ex. Cu atqui inimicus vim, quo id case falli aliquam, nec mollis melius mediocritatem in.



FILLABLE PAGE

Describe any projects your agency participated in that had a positive impact on sustainability. Include projects relating to infrastructure improvements and behavioral change.

FUTURE PLANNING



FILLABLE PAGE

Highlight future plans

Describe any planned projects at your agency to reduce GHG emissions, water use, and waste.

HOW FUTURE SPPs WILL DIFFER

Occupancy Data Collected

Sufficient data will be collected allowing agencies to track environmental performance in buildings they occupy

Strategies and Financing Mechanisms

Project teams will have a suite of sustainability strategies for agencies to implement along with adequate financing options

Complete Baseline Data

Baseline data will be collected allowing measurement and tracking of progress towards reduction goals

Interim Goals/Subtargets Developed

Additional goals and subtargets will be established to track progress beyond the three environmental targets in EO 1

OTHER REPORTING PRODUCTS



2020 PROGRESS REPORT



+Technology Committee"

In Draft Stage

Due Feb 1, 2020, submitted by co-chairs

A "report on progress in implementing this Order to the Governor and the... Environment Committee and Energy



SNAPSHOTS (FUTURE SCORECARDS)



Agencies

Snapshots will be created by the Reporting Team for each agency and will be released in Feb 2020. Agency scorecards in future years will look different.

Once sub-targets are developed in 2020, scorecards will illustrate agency progress compared to the baseline data.

Current Snapshot of

DATA VISUALIZATIONS

Electric Use in Prior 12 Mo	onths by Agency
DOC_Reporting	60,726,365 kWh
DOT_Reporting	43,882,146 kWh
DAS_Reporting	33,883,827 kWh
SDE_Reporting	29,300,805 kWh
MHA_Reporting	19,189,740 kWh
ESPP_Reporting	12,875,449 kWh
MIL_Reporting	11,147,255 kWh
DDS_Reporting	8,307,840 kWh
DCF_Reporting	7,458,377 kWh
DEEP_Reporting	5,904,688 kWh
DPH_Reporting	4,923,214 kWh
DVA_Reporting	3,655,493 kWh
DOL_Reporting	3,430,671 kWh
DMV_Reporting	3,150,346 kWh
DSS_Reporting	1,588,226 kWh
DCJ_Reporting	1,093,558 kWh
AES_Reporting	943,614 kWh
ADS_Reporting	340,462 kWh 🚽

GreenerGovCT

Executive Branch Commodity Costs in the Past Year



Statewide EnergyCAP Dashboards

- To encourage transparency, interactive
- and live data visualizations (searchable by
- agency) will be posted on the Greener Gov
- website to illustrate utility-related metrics
- across state buildings.

STATE MATERIALS MANAGEMENT OVERVIEW





State Materials Management Overview

Chris Nelson Sustainable Materials Management Planning and Implementation Waste Engineering and Enforcement Division

Steering Committee on State Sustainability November 8, 2019



State government plays important role in CMMS goals

Connecticut must improve the performance of municipal recycling systems, **reduce waste**, and increase compliance with mandatory recycling provisions. To make progress, the CMMS calls for contributions across the materials management spectrum, including from:

Shared responsibility -

- Product manufacturers
- Consumers/residents
- Institutions/businesses
- Haulers/collectors
- Facilities/processers
- State and local governments



Materials Management Management Hierarchy





Connecticut's Materials Management System

Tons Disposed & Recycled (FY2013)





Connecticut's Vision for Sustainable Materials Management

Divert 60 percent of materials that would otherwise be disposed by:

- **Improving** municipal recycling systems, reducing waste, and increasing compliance with mandatory recycling provisions.
- Innovating recycling, conversion, and disposal infrastructure.
- **Involving** corporations that design, produce, and market products in stewarding those materials in a circular economy.



Why 60% Diversion?

Regional capacity for waste management is shrinking and becoming more expensive.

- 2.3 Million TPY MSW to Dispose
- - 2 Million TPY WtE Capacity
- 300,000 tons MSW must go out-of-state this year.

CT has an aggressive target of 45% reduction in GHG emissions by 2030. Over 40 percent of GHG emissions globally are associated with the extraction, production, transportation, and disposal of consumer goods.



What is Diversion?

The CMMS defines diversion to include:

- Reduction in annual MSW generation (≈ 10%)
- Reuse, recycling, and composting (≈ 45%)
- Use of newer waste conversion processes, including anaerobic digestion, to manage materials that would otherwise be disposed via traditional waste-to-energy or landfill (≥ 300K tons)



Why Focus on Organics?

Compostable Materials By Weight Overall Statewide Disposed Source: 2015 Statewide Waste Characterization Study – Table 3-1								
Material	Est. Percent	Est. Tons						
Food Waste	22.3%	519,832						
Compostable Paper	10.7%	249,829						
Leaves & Grass	4.3%	100,548						
Prunings & Trimmings	1.9%	44,819						
Branches & Stumps	0.5%	11,722						
Total	39.7%	926,750						



Organics Recycling Law (CGS 22a-226e)

- Applies to food wholesalers, distributors, manufacturers, processors, supermarkets, resorts & conference centers that:
 - Generate an average projected volume of 104 tons/yr of source separated organics, and are
 - Within 20 miles of a SSOM processing facility.
- Must source separate and ensure recycling "at any authorized SSOM composting facility" that has available capacity and can accept food scrap.
- Generation volume threshold reduces to 52 tons/yr in 2020



EPA's Food Recovery Hierarchy





"If you can't measure it, you can't improve it." - Peter Drucker

Applicable to State's EO1 efforts to reduce:

- Energy consumption
- Water consumption
- Waste generation



Materials Management Data

- Unlike energy usage and water consumption, which are both accurately metered as the basis for payment for those services, waste & recycling management services are not based on precise measurements (on a ton or volumetric basis).
- Waste & recycling services are usually bundled.
- Customer often pays the same for collection regardless of whether the dumpster/bin is full to capacity or not.
 - Difficult to measure progress without tonnage or volume data
 - No financial savings typically recognized by customers for waste reduction improvements



Materials Management Data (cont.)

- As part of EO1 planning process, options to improve data capture in this area are being explored.
- Implementation of Best Management Practices (BMPs) for management of waste & recyclables will go a long way to making progress, even if the results/improvements cannot be precisely measured.



Questions?

Sustainable Materials Management Planning and Implementation Waste Engineering and Enforcement Division CT Department of Energy and Environmental Protection

> Chris Nelson, Supervising Environmental Analyst Chris.Nelson@ct.gov (860) 424-3454

Jennifer Weymouth, Environmental Analyst Jennifer.Weymouth@ct.gov (860) 424-3508



NEW REPORTING REQUIREMENTS



Project Team Requirements

Agendas

Must be sent within **2 business days** pre-meeting Please **include meeting date, time and location Send to** Mildred.Melendez@ct.gov and Rose.Croog@ct.gov

Minutes

Must be sent within **5 business days post-meeting** Send to Mildred.Melendez@ct.gov and Rose.Croog@ct.gov



Project Team Report-Outs

Even Months

- Renewable Energy
- Sustainable Materials Management
- Process Improvement
- Reporting

Odd Months

- Public Engagement
- Sustainability in Leased Spaces
- Energy Efficiency
- Sustainable Water Use
- Clean and Efficient Transportation

Send completed report-outs to leadbyexample@ct.gov one week prior to SSO meetings





PROJECT TEAM REPORT-OUTS









PUBLIC ENGAGEMENT **REPORT-OUT**



ENERGY EFFICIENCY **REPORT-OUT**



SUSTAINABLE WATER USE **REPORT-OUT**



SUSTAINABILITY IN LEASED SPACES REPORT-OUT



CLEAN + EFFICIENT TRANSPORTATION REPORT-OUT

NEXT STEPS



SPP Planning

Begin brainstorming for fillable sections in SPPs

NEXT STEPS

Level 2

Complete Level 2 (building inventory) by next SSO Meeting

Policy Document

Review Accounting and Reporting Policy Document (when shared)

